

Sequence Listing

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Tyr	Arg	Thr	Asp	Lys	Tyr	Lys	Arg	Leu	Lys	Ala	Glu	Val	Glu	Lys
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Gln	Ser	Lys	Lys	Leu	Glu	Lys	Lys	Lys	Glu	Thr	Ile	Thr	Glu	Ser
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Ala	Gly	Arg	Gln	Gln	Lys	Lys	Lys	Ile	Glu	Arg	Gln	Glu	Glu	Lys
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Leu	Lys	Asn	Asn	Asn	Arg	Asp	Leu	Ser	Met	Val	Arg	Met	Lys	Ser
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Met	Phe	Ala	Ile	Gly	Phe	Cys	Phe	Thr	Ala	Leu	Met	Gly	Met	Phe
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Asn	Ser	Ile	Phe	Asp	Gly	Arg	Val	Val	Ala	Lys	Leu	Pro	Phe	Thr
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Pro	Leu	Ser	Tyr	Ile	Gln	Gly	Leu	Ser	His	Arg	Asn	Leu	Leu	Gly
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Thr	Met	Ser	Ile	Arg	Gln	Asn	Ile	Gln	Lys	Ile	Leu	Gly	Leu	Ala
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Pro	Ser	Arg	Ala	Ala	Thr	Lys	Gln	Ala	Gly	Gly	Phe	Leu	Gly	Pro
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				65					70					75	
Met	Ala	Asp	Asn	Ala	Cys	Val	Leu	Phe	Ala	Val	Ser	Val	Leu	Met	
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Phe	Ile	Ile	Ser	Ser	Met	Leu	Val	Tyr	Gly	Ala	Ile	Ser	Tyr	Gln	
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Val	Gly	Trp	Leu	Ile	Pro	Phe	Phe	Cys	Tyr	Arg	Leu	Phe	Asp	Phe	
				110					115					120	
Val	Leu	Ser	Cys	Leu	Val	Ala	Ile	Ser	Ser	Leu	Thr	Tyr	Leu	Pro	
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Arg	Ile	Lys	Glu	Tyr	Leu	Asp	Gln	Leu	Pro	Asp	Phe	Pro	Tyr	Lys	
				140					145					150	
Asp	Asp	Leu	Leu	Ala	Leu	Asp	Ser	Ser	Cys	Leu	Leu	Phe	Ile	Val	
				155					160					165	
Leu	Val	Phe	Phe	Ala	Leu	Phe	Ile	Ile	Phe	Lys	Ala	Tyr	Leu	Ile	
				170					175					180	
Asn	Cys	Val	Trp	Asn	Cys	Tyr	Lys	Tyr	Ile	Asn	Asn	Arg	Asn	Val	
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Pro	Glu	Ile	Ala	Val	Tyr	Pro	Ala	Phe	Glu	Ser	Thr	Ser	Ser	Val	
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Ile	Ser	Phe	Gly	Leu	Ser	Asp	Leu	Tyr	Gly	Asp	Asn	Arg	Val	His	95	100	105	
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Glu	Asp	Pro	Gln	Met	Gln	Pro	Val	Gln	Thr	Pro	Phe	Gly	Val	Val	185	190	195	
Thr	Phe	Leu	Gln	Ile	Val	Gly	Val	Cys	Thr	Glu	Glu	Leu	His	Ser	200	205	210	
Ala	Gln	Gln	Trp	Asn	Gly	Gln	Gly	Ile	Leu	Glu	Leu	Leu	Arg	Thr	215	220	225	
Val	Pro	Ile	Ala	Gly	Gly	Pro	Trp	Leu	Ile	Thr	Asp	Met	Arg	Arg	230	235	240	
Gly	Glu	Thr	Ile	Phe	Glu	Ile	Asp	Pro	His	Leu	Gln	Glu	Arg	Val	245	250	255	
Asp	Lys	Gly	Ile	Glu	Thr	Asp	Gly	Ser	Asn	Leu	Ser	Gly	Val	Ser	260	265	270	

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Glu	Asp	Ser	Arg	Ser	Ile	Cys	Ile	Gly	Thr	Gln	Pro	Arg	Arg	Leu	
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Ser	Gly	Lys	Asp	Thr	Glu	Gln	Ile	Arg	Glu	Thr	Leu	Arg	Arg	Gly	
				305					310					315	
Leu	Glu	Ile	Asn	Ser	Lys	Pro	Val	Leu	Pro	Pro	Ile	Asn	Pro	Gln	
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Arg	Gln	Asn	Gly	Leu	Ala	His	Asp	Arg	Ala	Pro	Ser	Arg	Lys	Asp	
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Ser	Leu	Glu	Ser	Asp	Ser	Ser	Thr	Ala	Ile	Ile	Pro	His	Glu	Leu	
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Ile	Arg	Thr	Arg	Gln	Leu	Glu	Ser	Val	His	Leu	Lys	Phe	Asn	Gln	
				365					370					375	
Glu	Ser	Gly	Ala	Leu	Ile	Pro	Leu	Cys	Leu	Arg	Gly	Arg	Leu	Leu	
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His	Ala	Pro	Lys	Thr	Cys	Lys	Asn	Phe	Ala	Glu	Leu	Ala	Arg	Arg	35	40	45
Gly	Tyr	Tyr	Asn	Gly	Thr	Lys	Phe	His	Arg	Ile	Ile	Lys	Asp	Phe	50	55	60
Met	Ile	Gln	Gly	Gly	Asp	Pro	Thr	Gly	Thr	Gly	Arg	Gly	Gly	Ala	65	70	75
Ser	Ile	Tyr	Gly	Lys	Gln	Phe	Glu	Asp	Glu	Leu	His	Pro	Asp	Leu	80	85	90
Lys	Phe	Thr	Gly	Ala	Gly	Ile	Leu	Ala	Met	Ala	Asn	Ala	Gly	Pro	95	100	105
Asp	Thr	Asn	Gly	Ser	Gln	Phe	Phe	Val	Thr	Leu	Ala	Pro	Thr	Gln	110	115	120
Trp	Leu	Asp	Gly	Lys	His	Thr	Ile	Phe	Gly	Arg	Val	Cys	Gln	Gly	125	130	135
Ile	Gly	Met	Val	Asn	Arg	Val	Gly	Met	Val	Glu	Thr	Asn	Ser	Gln	140	145	150
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35 40 45
Arg Ala Cys Lys Val His Leu Asp Ser Ala Val Ala Leu Ala Ala
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Glu Ser Pro Val Asn Met Met Pro Trp Gln Gly Asp Thr Asn Asn
65 70 75
Met Ile Asp Arg Phe Asp Val Arg Ala His Leu Asp His Ile Pro
80 85 90
Asp Tyr Thr Pro Pro Leu Leu Thr Thr Ile Ser Pro Glu Gln Glu
95 100 105
Ser Asp Glu Arg Lys Cys Asn Tyr Glu Arg Tyr Arg Gly Leu Val
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Gln Asn Asp Phe Ala Gly Ile Ser Glu Glu Gln Cys Leu Tyr Gln
125 130 135
Ile Tyr Ile Asp Glu Leu Tyr Gly Gly Leu Gln Arg Pro Ser Glu
140 145 150
Asp Glu Lys Lys Lys Leu Ala Glu Lys Lys Ala Ser Ile Gly Tyr
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Thr Tyr Glu Asp Ser Thr Val Ala Glu Val Glu Lys Ala Ala Glu
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Lys Pro Glu Glu Glu Glu Ser Ala Ala Glu Glu Glu Ser Asn Ser
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Arg Ser Arg Ser	Gln Ser Pro Ser Pro	Ser Pro Ala Arg Glu	Lys		
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Leu Thr Arg Pro	Ala Ala Ser Pro Ala	Val Gly Glu Lys Leu	Lys		
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Lys Thr Glu Pro	Ala Ala Gly Lys Glu	Thr Gly Ala Ala Lys	Val		
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<211> 334
<212> PRT
<213> Homo Sapien

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35 40 45
Gly Trp Arg Arg Ala Val Trp Glu Lys Asn Met Lys Met Ile Glu
50 55 60
Leu His Asn Gly Glu Tyr Ser Gln Gly Lys His Gly Phe Thr Met
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Ala Met Asn Ala Phe Gly Asp Met Thr Asn Glu Glu Phe Arg Gln
80 85 90
Met Met Gly Cys Phe Arg Asn Gln Lys Phe Arg Lys Gly Lys Val
95 100 105

Phe	Arg	Glu	Pro	Leu	Phe	Leu	Asp	Leu	Pro	Lys	Ser	Val	Asp	Trp
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Arg	Lys	Lys	Gly	Tyr	Val	Thr	Pro	Val	Lys	Asn	Gln	Lys	Gln	Cys
				125					130					135
Gly	Ser	Cys	Trp	Ala	Phe	Ser	Ala	Thr	Gly	Ala	Leu	Glu	Gly	Gln
				140					145					150
Met	Phe	Arg	Lys	Thr	Gly	Lys	Leu	Val	Ser	Leu	Ser	Glu	Gln	Asn
				155					160					165
Leu	Val	Asp	Cys	Ser	Arg	Pro	Gln	Gly	Asn	Gln	Gly	Cys	Asn	Gly
				170					175					180
Gly	Phe	Met	Ala	Arg	Ala	Phe	Gln	Tyr	Val	Lys	Glu	Asn	Gly	Gly
				185					190					195
Leu	Asp	Ser	Glu	Glu	Ser	Tyr	Pro	Tyr	Val	Ala	Val	Asp	Glu	Ile
				200					205					210
Cys	Lys	Tyr	Arg	Pro	Glu	Asn	Ser	Val	Ala	Asn	Asp	Thr	Gly	Phe
				215					220					225
Thr	Val	Val	Ala	Pro	Gly	Lys	Glu	Lys	Ala	Leu	Met	Lys	Ala	Val
				230					235					240
Ala	Thr	Val	Gly	Pro	Ile	Ser	Val	Ala	Met	Asp	Ala	Gly	His	Ser
				245					250					255
Ser	Phe	Gln	Phe	Tyr	Lys	Ser	Gly	Ile	Tyr	Phe	Glu	Pro	Asp	Cys
				260					265					270
Ser	Ser	Lys	Asn	Leu	Asp	His	Gly	Val	Leu	Val	Val	Gly	Tyr	Gly
				275					280					285
Phe	Glu	Gly	Ala	Asn	Ser	Asn	Asn	Ser	Lys	Tyr	Trp	Leu	Val	Lys
				290					295					300
Asn	Ser	Trp	Gly	Pro	Glu	Trp	Gly	Ser	Asn	Gly	Tyr	Val	Lys	Ile
				305					310					315
Ala	Lys	Asp	Lys	Asn	Asn	His	Cys	Gly	Ile	Ala	Thr	Ala	Ala	Ser
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Tyr Pro Asn Val

<210> 13

<211> 2762

<212> DNA

<213> Homo Sapien

<400> 13

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<210> 14
 <211> 541
 <212> PRT
 <213> Homo Sapien

<400> 14
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Val	Gly	Gly	Leu	Ile	Ala	Pro	Gly	Pro	Thr	Thr	Ala	Val	Ser	Tyr	
				35					40					45	
Met	Ser	Val	Lys	Cys	Val	Asp	Ala	Arg	Lys	Asn	His	His	Lys	Thr	
				50					55					60	
Lys	Trp	Phe	Val	Pro	Trp	Gly	Pro	Asn	His	Cys	Asp	Lys	Ile	Arg	
				65					70					75	
Asp	Ile	Glu	Glu	Ala	Ile	Pro	Arg	Glu	Ile	Glu	Ala	Asn	Asp	Ile	
				80					85					90	
Val	Phe	Ser	Val	His	Ile	Pro	Leu	Pro	His	Met	Glu	Met	Ser	Pro	
				95					100					105	
Trp	Phe	Gln	Phe	Met	Leu	Phe	Ile	Leu	Gln	Leu	Asp	Ile	Ala	Phe	
				110					115					120	
Lys	Leu	Asn	Asn	Gln	Ile	Arg	Glu	Asn	Ala	Glu	Val	Ser	Met	Asp	
				125					130					135	
Val	Ser	Leu	Ala	Tyr	Arg	Asp	Asp	Ala	Phe	Ala	Glu	Trp	Thr	Glu	
				140					145					150	
Met	Ala	His	Glu	Arg	Val	Pro	Arg	Lys	Leu	Lys	Cys	Thr	Phe	Thr	
				155					160					165	
Ser	Pro	Lys	Thr	Pro	Glu	His	Glu	Gly	Arg	Tyr	Tyr	Glu	Cys	Asp	
				170					175					180	
Val	Leu	Pro	Phe	Met	Glu	Ile	Gly	Ser	Val	Ala	His	Lys	Phe	Tyr	
				185					190					195	
Leu	Leu	Asn	Ile	Arg	Leu	Pro	Val	Asn	Glu	Lys	Lys	Lys	Ile	Asn	
				200					205					210	
Val	Gly	Ile	Gly	Glu	Ile	Lys	Asp	Ile	Arg	Leu	Val	Gly	Ile	His	
				215					220					225	
Gln	Asn	Gly	Gly	Phe	Thr	Lys	Val	Trp	Phe	Ala	Met	Lys	Thr	Phe	
				230					235					240	
Leu	Thr	Pro	Ser	Ile	Phe	Ile	Ile	Met	Val	Trp	Tyr	Trp	Arg	Arg	
				245					250					255	
Ile	Thr	Met	Met	Ser	Arg	Pro	Pro	Val	Leu	Leu	Glu	Lys	Val	Ile	
				260					265					270	
Phe	Ala	Leu	Gly	Ile	Ser	Met	Thr	Phe	Ile	Asn	Ile	Pro	Val	Glu	
				275					280					285	
Trp	Phe	Ser	Ile	Gly	Phe	Asp	Trp	Thr	Trp	Met	Leu	Leu	Phe	Gly	
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Asp	Ile	Arg	Gln	Gly	Ile	Phe	Tyr	Ala	Met	Leu	Leu	Ser	Phe	Trp	

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Ile Ile Phe Cys Gly	Glu His Met Met	Asp Gln His Glu Arg	Asn		
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His Ile Ala Gly Tyr	Trp Lys Gln Val	Gly Pro Ile Ala Val	Gly		
	335	340	345		
Ser Phe Cys Leu Phe	Ile Phe Asp Met	Cys Glu Arg Gly Val	Gln		
	350	355	360		
Leu Thr Asn Pro Phe	Tyr Ser Ile Trp	Thr Thr Asp Ile Gly	Thr		
	365	370	375		
Glu Leu Ala Met Ala	Phe Ile Ile Val	Ala Gly Ile Cys Leu	Cys		
	380	385	390		
Leu Tyr Phe Leu Phe	Leu Cys Phe Met	Val Phe Gln Val Phe	Arg		
	395	400	405		
Asn Ile Ser Gly Lys	Gln Ser Ser Leu	Pro Ala Met Ser Lys	Val		
	410	415	420		
Arg Arg Leu His Tyr	Glu Gly Leu Ile	Phe Arg Phe Lys Phe	Leu		
	425	430	435		
Met Leu Ile Thr Leu	Ala Cys Ala Ala	Met Thr Val Ile Phe	Phe		
	440	445	450		
Ile Val Ser Gln Val	Thr Glu Gly His	Trp Lys Trp Gly Gly	Val		
	455	460	465		
Thr Val Gln Val Asn	Ser Ala Phe Phe	Thr Gly Ile Tyr Gly	Met		
	470	475	480		
Trp Asn Leu Tyr Val	Phe Ala Leu Met	Phe Leu Tyr Ala Pro	Ser		
	485	490	495		
His Lys Asn Tyr Gly	Glu Asp Gln Ser	Asn Gly Asp Leu Gly	Val		
	500	505	510		
His Ser Gly Glu Glu	Leu Gln Leu Thr	Thr Thr Ile Thr His	Val		
	515	520	525		
Asp Gly Pro Thr Glu	Ile Tyr Lys Leu	Thr Arg Lys Glu Ala	Gln		
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<210> 15
 <211> 2956
 <212> DNA
 <213> Homo Sapien

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<210> 16

<211> 691

<212> PRT

<213> Homo Sapien

<400> 16

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				20					25					30
Glu	Cys	His	Tyr	Thr	Leu	Pro	Pro	Gly	Thr	Met	Pro	Ser	Ala	Ser
				35					40					45
Asp	Trp	Ile	Gly	Ile	Phe	Lys	Val	Glu	Ala	Ala	Cys	Val	Arg	Asp
				50					55					60
Tyr	His	Thr	Phe	Val	Trp	Ser	Ser	Val	Pro	Glu	Ser	Thr	Thr	Asp
				65					70					75
Gly	Ser	Pro	Ile	His	Thr	Ser	Val	Gln	Phe	Gln	Ala	Ser	Tyr	Leu
				80					85					90
Pro	Lys	Pro	Gly	Ala	Gln	Leu	Tyr	Gln	Phe	Arg	Tyr	Val	Asn	Arg
				95					100					105
Gln	Gly	Gln	Val	Cys	Gly	Gln	Ser	Pro	Pro	Phe	Gln	Phe	Arg	Glu
				110					115					120
Pro	Arg	Pro	Met	Asp	Glu	Leu	Val	Thr	Leu	Glu	Glu	Ala	Asp	Gly
				125					130					135
Gly	Ser	Asp	Ile	Leu	Leu	Val	Val	Pro	Lys	Ala	Thr	Val	Leu	Gln
				140					145					150
Asn	Gln	Leu	Asp	Glu	Ser	Gln	Gln	Glu	Arg	Asn	Asp	Leu	Met	Gln
				155					160					165
Leu	Lys	Leu	Gln	Leu	Glu	Gly	Gln	Val	Thr	Glu	Leu	Arg	Ser	Arg
				170					175					180
Val	Gln	Glu	Leu	Glu	Arg	Ala	Leu	Ala	Thr	Ala	Arg	Gln	Glu	His
				185					190					195
Thr	Glu	Leu	Met	Glu	Gln	Tyr	Lys	Gly	Ile	Ser	Arg	Ser	His	Gly
				200					205					210
Glu	Ile	Thr	Glu	Glu	Arg	Asp	Ile	Leu	Ser	Arg	Gln	Gln	Gly	Asp
				215					220					225
His	Val	Ala	Arg	Ile	Leu	Glu	Leu	Glu	Asp	Asp	Ile	Gln	Thr	Ile
				230					235					240
Ser	Glu	Lys	Val	Leu	Thr	Lys	Glu	Val	Glu	Leu	Asp	Arg	Leu	Arg
				245					250					255

Asp	Thr	Val	Lys	Ala	Leu	Thr	Arg	Glu	Gln	Glu	Lys	Leu	Leu	Gly	260	265	270
Gln	Leu	Lys	Glu	Val	Gln	Ala	Asp	Lys	Glu	Gln	Ser	Glu	Ala	Glu	275	280	285
Leu	Gln	Val	Ala	Gln	Gln	Glu	Asn	His	His	Leu	Asn	Leu	Asp	Leu	290	295	300
Lys	Glu	Ala	Lys	Ser	Trp	Gln	Glu	Glu	Gln	Ser	Ala	Gln	Ala	Gln	305	310	315
Arg	Leu	Lys	Asp	Lys	Val	Ala	Gln	Met	Lys	Asp	Thr	Leu	Gly	Gln	320	325	330
Ala	Gln	Gln	Arg	Val	Ala	Glu	Leu	Glu	Pro	Leu	Lys	Glu	Gln	Leu	335	340	345
Arg	Gly	Ala	Gln	Glu	Leu	Ala	Ala	Ser	Ser	Gln	Gln	Lys	Ala	Thr	350	355	360
Leu	Leu	Gly	Glu	Glu	Leu	Ala	Ser	Ala	Ala	Ala	Ala	Arg	Asp	Arg	365	370	375
Thr	Ile	Ala	Glu	Leu	His	Arg	Ser	Arg	Leu	Glu	Val	Ala	Glu	Val	380	385	390
Asn	Gly	Arg	Leu	Ala	Glu	Leu	Gly	Leu	His	Leu	Lys	Glu	Glu	Lys	395	400	405
Cys	Gln	Trp	Ser	Lys	Glu	Arg	Ala	Gly	Leu	Leu	Gln	Ser	Val	Glu	410	415	420
Ala	Glu	Lys	Asp	Lys	Ile	Leu	Lys	Leu	Ser	Ala	Glu	Ile	Leu	Arg	425	430	435
Leu	Glu	Lys	Ala	Val	Gln	Glu	Glu	Arg	Thr	Gln	Asn	Gln	Val	Phe	440	445	450
Lys	Thr	Glu	Leu	Ala	Arg	Glu	Lys	Asp	Ser	Ser	Leu	Val	Gln	Leu	455	460	465
Ser	Glu	Ser	Lys	Arg	Glu	Leu	Thr	Glu	Leu	Arg	Ser	Ala	Leu	Arg	470	475	480
Val	Leu	Gln	Lys	Glu	Lys	Glu	Gln	Leu	Gln	Glu	Glu	Lys	Gln	Glu	485	490	495
Leu	Leu	Glu	Tyr	Met	Arg	Lys	Leu	Glu	Ala	Arg	Leu	Glu	Lys	Val	500	505	510
Ala	Asp	Glu	Lys	Trp	Asn	Glu	Asp	Ala	Thr	Thr	Glu	Asp	Glu	Glu	515	520	525
Ala	Ala	Val	Gly	Leu	Ser	Cys	Pro	Ala	Ala	Leu	Thr	Asp	Ser	Glu	530	535	540
Asp	Glu	Ser	Pro	Glu	Asp	Met	Arg	Leu	Pro	Pro	Tyr	Gly	Leu	Cys			

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Glu Arg Gly Asp	Pro Gly Ser Ser Pro	Ala Gly Pro Arg Glu	Ala		
	560		565		570
Ser Pro Leu Val	Val Ile Ser Gln Pro	Ala Pro Ile Ser Pro	His		
	575		580		585
Leu Ser Gly Pro	Ala Glu Asp Ser Ser	Ser Asp Ser Glu Ala	Glu		
	590		595		600
Asp Glu Lys Ser	Val Leu Met Ala Ala	Val Gln Ser Gly Gly	Glu		
	605		610		615
Glu Ala Asn Leu	Leu Leu Pro Glu Leu	Gly Ser Ala Phe Tyr	Asp		
	620		625		630
Met Ala Ser Gly	Phe Thr Val Gly Thr	Leu Ser Glu Thr Ser	Thr		
	635		640		645
Gly Gly Pro Ala	Thr Pro Thr Trp Lys	Glu Cys Pro Ile Cys	Lys		
	650		655		660
Glu Arg Phe Pro	Ala Glu Ser Asp Lys	Asp Ala Leu Glu Asp	His		
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Met Asp Gly His	Phe Phe Phe Ser Thr	Gln Asp Pro Phe Thr	Phe		
	680		685		690

Glu

<210> 17
 <211> 1528
 <212> DNA
 <213> Homo Sapien

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 gaaccccagc ctgcagacca ccaccttcta tttcattgtc tctctagccc 300
 tggctgacat tgctgttggg gtgctgggtca tgcctttggc cattgttgtc 350
 agcctgggca tcacaatcca cttctacagc tgccttttta tgacttgcct 400
 actgcttata tttacccacg cctccatcat gtccttgctg gccatcgctg 450
 tggaccgata cttgcgggtc aagcttaccg tcagattcag aattcctggg 500

ctccctgggt gcattctatc attccagttg aaagtttgct tccttccagt 550
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 atctgcaact acaatgcccc ctacaagaat caccceaaat actggtgccg 700
 aggctatttc cgtgactact gcaacatcat cgccttctcc cctaacagca 750
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<210> 18
 <211> 347
 <212> PRT
 <213> Homo Sapien

<400> 18
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 35 40 45
 Thr Thr Phe Tyr Phe Ile Val Ser Leu Ala Leu Ala Asp Ile Ala

				50					55					60
Val	Gly	Val	Leu	Val	Met	Pro	Leu	Ala	Ile	Val	Val	Ser	Leu	Gly
				65					70					75
Ile	Thr	Ile	His	Phe	Tyr	Ser	Cys	Leu	Phe	Met	Thr	Cys	Leu	Leu
				80					85					90
Leu	Ile	Phe	Thr	His	Ala	Ser	Ile	Met	Ser	Leu	Leu	Ala	Ile	Ala
				95					100					105
Val	Asp	Arg	Tyr	Leu	Arg	Val	Lys	Leu	Thr	Val	Arg	Phe	Arg	Ile
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Pro	Gly	Leu	Pro	Gly	Cys	Ile	Leu	Ser	Phe	Gln	Leu	Lys	Val	Cys
				125					130					135
Phe	Leu	Pro	Val	Met	Trp	Leu	Phe	Ile	Leu	Leu	Ser	Leu	Ala	Leu
				140					145					150
Ile	Ser	Asp	Ala	Met	Val	Met	Asp	Glu	Lys	Val	Lys	Arg	Ser	Phe
				155					160					165
Val	Leu	Asp	Thr	Ala	Ser	Ala	Ile	Cys	Asn	Tyr	Asn	Ala	His	Tyr
				170					175					180
Lys	Asn	His	Pro	Lys	Tyr	Trp	Cys	Arg	Gly	Tyr	Phe	Arg	Asp	Tyr
				185					190					195
Cys	Asn	Ile	Ile	Ala	Phe	Ser	Pro	Asn	Ser	Thr	Asn	His	Val	Ala
				200					205					210
Leu	Arg	Asp	Thr	Gly	Asn	Gln	Leu	Ile	Val	Thr	Met	Ser	Cys	Leu
				215					220					225
Thr	Lys	Glu	Asp	Thr	Gly	Trp	Tyr	Trp	Cys	Gly	Ile	Gln	Arg	Asp
				230					235					240
Phe	Ala	Arg	Asp	Asp	Met	Asp	Phe	Thr	Glu	Leu	Ile	Val	Thr	Asp
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Asp	Lys	Gly	Thr	Leu	Ala	Asn	Asp	Phe	Trp	Ser	Gly	Lys	Asp	Leu
				260					265					270
Ser	Gly	Asn	Lys	Thr	Arg	Ser	Cys	Lys	Ala	Pro	Lys	Val	Val	Arg
				275					280					285
Lys	Ala	Asp	Arg	Ser	Arg	Thr	Ser	Ile	Leu	Ile	Ile	Cys	Ile	Leu
				290					295					300
Ile	Thr	Gly	Leu	Gly	Ile	Ile	Ser	Val	Ile	Ser	His	Leu	Thr	Lys
				305					310					315
Arg	Arg	Arg	Ser	Gln	Arg	Asn	Arg	Arg	Val	Gly	Asn	Thr	Leu	Lys
				320					325					330
Pro	Phe	Ser	Arg	Val	Leu	Thr	Pro	Lys	Glu	Met	Ala	Pro	Thr	Glu
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Gln Met

<210> 19

<211> 3906

<212> DNA

<213> Homo Sapien

<400> 19

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ctgtgaaagc agataaaaga aaacatttat taacgtgtca ttacgagggg 200
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<210> 20
 <211> 867
 <212> PRT
 <213> Homo Sapien

<400> 20
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Leu	Lys	Gly	Arg	Phe	Gln	Arg	Asp	Arg	Arg	Asn	Ile	Arg	Pro	Asn	
				35					40					45	
Ile	Ile	Leu	Val	Leu	Thr	Asp	Asp	Gln	Asp	Val	Glu	Leu	Gly	Ser	
				50					55					60	
Met	Gln	Val	Met	Asn	Lys	Thr	Arg	Arg	Ile	Met	Glu	Gln	Gly	Gly	
				65					70					75	
Ala	His	Phe	Ile	Asn	Ala	Phe	Val	Thr	Thr	Pro	Met	Cys	Cys	Pro	
				80					85					90	
Ser	Arg	Ser	Ser	Ile	Leu	Thr	Gly	Lys	Tyr	Val	His	Asn	His	Asn	
				95					100					105	
Thr	Tyr	Thr	Asn	Asn	Glu	Asn	Cys	Ser	Ser	Pro	Ser	Trp	Gln	Ala	
				110					115					120	
Gln	His	Glu	Ser	Arg	Thr	Phe	Ala	Val	Tyr	Leu	Asn	Ser	Thr	Gly	
				125					130					135	
Tyr	Arg	Thr	Ala	Phe	Phe	Gly	Lys	Tyr	Leu	Asn	Glu	Tyr	Asn	Gly	
				140					145					150	
Ser	Tyr	Val	Pro	Pro	Gly	Trp	Lys	Glu	Trp	Val	Gly	Leu	Leu	Lys	
				155					160					165	
Asn	Ser	Arg	Phe	Tyr	Asn	Tyr	Thr	Leu	Cys	Arg	Asn	Gly	Val	Lys	
				170					175					180	
Glu	Lys	His	Gly	Ser	Asp	Tyr	Ser	Lys	Asp	Tyr	Leu	Thr	Asp	Leu	
				185					190					195	
Ile	Thr	Asn	Asp	Ser	Val	Ser	Phe	Phe	Arg	Thr	Ser	Lys	Lys	Met	
				200					205					210	
Tyr	Pro	His	Arg	Pro	Val	Leu	Met	Val	Ile	Ser	His	Ala	Ala	Pro	
				215					220					225	
His	Gly	Pro	Glu	Asp	Ser	Ala	Pro	Gln	Tyr	Ser	Arg	Leu	Phe	Pro	
				230					235					240	
Asn	Ala	Ser	Gln	His	Ile	Thr	Pro	Ser	Tyr	Asn	Tyr	Ala	Pro	Asn	
				245					250					255	
Pro	Asp	Lys	His	Trp	Ile	Met	Arg	Tyr	Thr	Gly	Pro	Met	Lys	Pro	
				260					265					270	
Ile	His	Met	Glu	Phe	Thr	Asn	Met	Leu	Gln	Arg	Lys	Arg	Leu	Gln	
				275					280					285	
Thr	Leu	Met	Ser	Val	Asp	Asp	Ser	Met	Glu	Thr	Ile	Tyr	Asn	Met	
				290					295					300	
Leu	Val	Glu	Thr	Gly	Glu	Leu	Asp	Asn	Thr	Tyr	Ile	Val	Tyr	Thr	

	305		310		315
Ala Asp His Gly Tyr His Ile Gly Gln Phe Gly Leu Val Lys Gly	320		325		330
Lys Ser Met Pro Tyr Glu Phe Asp Ile Arg Val Pro Phe Tyr Val	335		340		345
Arg Gly Pro Asn Val Glu Ala Gly Cys Leu Asn Pro His Ile Val	350		355		360
Leu Asn Ile Asp Leu Ala Pro Thr Ile Leu Asp Ile Ala Gly Leu	365		370		375
Asp Ile Pro Ala Asp Met Asp Gly Lys Ser Ile Leu Lys Leu Leu	380		385		390
Asp Thr Glu Arg Pro Val Asn Arg Phe His Leu Lys Lys Lys Met	395		400		405
Arg Val Trp Arg Asp Ser Phe Leu Val Glu Arg Gly Lys Leu Leu	410		415		420
His Lys Arg Asp Asn Asp Lys Val Asp Ala Gln Glu Glu Asn Phe	425		430		435
Leu Pro Lys Tyr Gln Arg Val Lys Asp Leu Cys Gln Arg Ala Glu	440		445		450
Tyr Gln Thr Ala Cys Glu Gln Leu Gly Gln Lys Trp Gln Cys Val	455		460		465
Glu Asp Ala Thr Gly Lys Leu Lys Leu His Lys Cys Lys Gly Pro	470		475		480
Met Arg Leu Gly Gly Ser Arg Ala Leu Ser Asn Leu Val Pro Lys	485		490		495
Tyr Tyr Gly Gln Gly Ser Glu Ala Cys Thr Cys Asp Ser Gly Asp	500		505		510
Tyr Lys Leu Ser Leu Ala Gly Arg Arg Lys Lys Leu Phe Lys Lys	515		520		525
Lys Tyr Lys Ala Ser Tyr Val Arg Ser Arg Ser Ile Arg Ser Val	530		535		540
Ala Ile Glu Val Asp Gly Arg Val Tyr His Val Gly Leu Gly Asp	545		550		555
Ala Ala Gln Pro Arg Asn Leu Thr Lys Arg His Trp Pro Gly Ala	560		565		570
Pro Glu Asp Gln Asp Asp Lys Asp Gly Gly Asp Phe Ser Gly Thr	575		580		585
Gly Gly Leu Pro Asp Tyr Ser Ala Ala Asn Pro Ile Lys Val Thr	590		595		600

His	Arg	Cys	Tyr	Ile	Leu	Glu	Asn	Asp	Thr	Val	Gln	Cys	Asp	Leu	
				605					610					615	
Asp	Leu	Tyr	Lys	Ser	Leu	Gln	Ala	Trp	Lys	Asp	His	Lys	Leu	His	
				620					625					630	
Ile	Asp	His	Glu	Ile	Glu	Thr	Leu	Gln	Asn	Lys	Ile	Lys	Asn	Leu	
				635					640					645	
Arg	Glu	Val	Arg	Gly	His	Leu	Lys	Lys	Lys	Arg	Pro	Glu	Glu	Cys	
				650					655					660	
Asp	Cys	His	Lys	Ile	Ser	Tyr	His	Thr	Gln	His	Lys	Gly	Arg	Leu	
				665					670					675	
Lys	His	Arg	Gly	Ser	Ser	Leu	His	Pro	Phe	Arg	Lys	Gly	Leu	Gln	
				680					685					690	
Glu	Lys	Asp	Lys	Val	Trp	Leu	Leu	Arg	Glu	Gln	Lys	Arg	Lys	Lys	
				695					700					705	
Lys	Leu	Arg	Lys	Leu	Leu	Lys	Arg	Leu	Gln	Asn	Asn	Asp	Thr	Cys	
				710					715					720	
Ser	Met	Pro	Gly	Leu	Thr	Cys	Phe	Thr	His	Asp	Asn	Gln	His	Trp	
				725					730					735	
Gln	Thr	Ala	Pro	Phe	Trp	Thr	Leu	Gly	Pro	Phe	Cys	Ala	Cys	Thr	
				740					745					750	
Ser	Ala	Asn	Asn	Asn	Thr	Tyr	Trp	Cys	Met	Arg	Thr	Ile	Asn	Glu	
				755					760					765	
Thr	His	Asn	Phe	Leu	Phe	Cys	Glu	Phe	Ala	Thr	Gly	Phe	Leu	Glu	
				770					775					780	
Tyr	Phe	Asp	Leu	Asn	Thr	Asp	Pro	Tyr	Gln	Leu	Met	Asn	Ala	Val	
				785					790					795	
Asn	Thr	Leu	Asp	Arg	Asp	Val	Leu	Asn	Gln	Leu	His	Val	Gln	Leu	
				800					805					810	
Met	Glu	Leu	Arg	Ser	Cys	Lys	Gly	Tyr	Lys	Gln	Cys	Asn	Pro	Arg	
				815					820					825	
Thr	Arg	Asn	Met	Asp	Leu	Asp	Gly	Gly	Ser	Tyr	Glu	Gln	Tyr	Arg	
				830					835					840	
Gln	Phe	Gln	Arg	Arg	Lys	Trp	Pro	Glu	Met	Lys	Arg	Pro	Ser	Ser	
				845					850					855	
Lys	Ser	Leu	Gly	Gln	Leu	Trp	Glu	Gly	Trp	Glu	Gly				
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<210> 21

<211> 1041

<212> DNA

<213> Homo Sapien

<400> 21

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acagactgct ttgctcgttg ttgctcttcg gaggcggcga tccccgaagg 200
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<210> 22

<211> 151

<212> PRT

<213> Homo Sapien

<400> 22

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Ile	Lys	Pro	Tyr	His	Leu	Lys	Arg	Ile	His	Arg	Ala	Val	Leu	His
				20					25					30
Gly	Asn	Leu	Glu	Lys	Leu	Lys	Tyr	Leu	Leu	Leu	Thr	Tyr	Tyr	Asp
				35					40					45

Ala	Asn	Lys	Arg	Asp	Arg	Lys	Glu	Arg	Thr	Ala	Leu	His	Leu	Ala	
				50					55					60	
Cys	Ala	Thr	Gly	Gln	Pro	Glu	Met	Val	His	Leu	Leu	Val	Ser	Arg	
				65					70					75	
Arg	Cys	Glu	Leu	Asn	Leu	Cys	Asp	Arg	Glu	Asp	Arg	Thr	Pro	Leu	
				80					85					90	
Ile	Lys	Ala	Val	Gln	Leu	Arg	Gln	Glu	Ala	Cys	Ala	Thr	Leu	Leu	
				95					100					105	
Leu	Gln	Asn	Gly	Ala	Asn	Pro	Asn	Ile	Thr	Asp	Phe	Phe	Gly	Arg	
				110					115					120	
Thr	Ala	Leu	His	Tyr	Ala	Val	Tyr	Asn	Glu	Asp	Thr	Ser	Met	Ile	
				125					130					135	
Glu	Lys	Leu	Leu	Ser	His	Gly	Thr	Asn	Ile	Glu	Glu	Cys	Ser	Lys	
				140					145					150	

Val

<210> 23
 <211> 1121
 <212> DNA
 <213> Homo Sapien

<400> 23
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 tcaaagttca agtagtgata tggatgactc cacagaaagg gagcagtcac 200
 gccttacttc ttgccttaag aaaagagaag aaatgaaact gaaggagtgt 250
 gtttccatcc tcccacggaa ggaaagcccc tctgtccgat cctccaaaga 300
 cggaaagctg ctggctgcaa ccttgctgct ggcactgctg tcttgctgcc 350
 tcacgggtggt gtctttctac caggtggccg ccctgcaagg ggacctggcc 400
 agcctccggg cagagctgca gggccaccac gcggagaagc tgccagcagg 450
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 aacagcagaa ataagcgtgc cgttcagggt ccagaagaaa cagtcactca 600
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 gatcttacac atttgttcca tggcttctca gctttaaag gggaagtgcc 700

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ctagaagaaa aagagaataa aatattgggc aaagaaactg gttacttttt 750
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taattcagag gaagaaggtc catgtctttg gggatgaatt gagtctggtg 850
actttgtttc gatgtattca aaatatgcct gaaacactac ccaataattc 900
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ataacaaaaa aaaaaaaaaa a 1121

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<210> 24
<211> 285
<212> PRT
<213> Homo Sapien

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<400> 24
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Leu Lys Lys Arg Glu Glu Met Lys Leu Lys Glu Cys Val Ser Ile
              20              25              30

Leu Pro Arg Lys Glu Ser Pro Ser Val Arg Ser Ser Lys Asp Gly
              35              40              45

Lys Leu Leu Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Cys Cys
              50              55              60

Leu Thr Val Val Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp
              65              70              75

Leu Ala Ser Leu Arg Ala Glu Leu Gln Gly His His Ala Glu Lys
              80              85              90

Leu Pro Ala Gly Ala Gly Ala Pro Lys Ala Gly Leu Glu Glu Ala
              95              100             105

Pro Ala Val Thr Ala Gly Leu Lys Ile Phe Glu Pro Pro Ala Pro
             110             115             120

Gly Glu Gly Asn Ser Ser Gln Asn Ser Arg Asn Lys Arg Ala Val
             125             130             135

Gln Gly Pro Glu Glu Thr Val Thr Gln Asp Cys Leu Gln Leu Ile
             140             145             150

Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys Gly Ser Tyr Thr Phe
             155             160             165

Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser Ala Leu Glu Glu

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	170		175		180
Lys Glu Asn Lys	Ile Leu Val Lys Glu	Thr Gly Tyr Phe Phe	Ile		
	185	190	195		
Tyr Gly Gln Val	Leu Tyr Thr Asp Lys	Thr Tyr Ala Met Gly	His		
	200	205	210		
Leu Ile Gln Arg	Lys Lys Val His Val	Phe Gly Asp Glu Leu	Ser		
	215	220	225		
Leu Val Thr Leu	Phe Arg Cys Ile Gln	Asn Met Pro Glu Thr	Leu		
	230	235	240		
Pro Asn Asn Ser	Cys Tyr Ser Ala Gly	Ile Ala Lys Leu Glu	Glu		
	245	250	255		
Gly Asp Glu Leu	Gln Leu Ala Ile Pro	Arg Glu Asn Ala Gln	Ile		
	260	265	270		
Ser Leu Asp Gly	Asp Val Thr Phe Phe	Gly Ala Leu Lys Leu	Leu		
	275	280	285		

<210> 25
 <211> 2698
 <212> DNA
 <213> Homo Sapien

<400> 25
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 gaaagctgcc agttggggac tttttgtgat cacggcgttg cagcgtttta 150
 aaggaggtga tggggcttgc gctggcttgt cttcccaccc aagtgaagag 200
 ttgatgttca ctggttatgc ttagacaatg tgcagtttgt gttaatttaa 250
 aattttgggt gggatagggg cataggcttg tgaagggcag tccggatccg 300
 gaggaactcg tctttgtccc tggtaggaga gacaccccca gtctatcctc 350
 gatgccgtca gccttggcca tcttcacttg ccgcccgaac tcgcacccgt 400
 ttcaggagcg tcatgtctac ctggacgagc ccatcaaaat cggccgctca 450
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 gctatcaagg aaccacgctc tcgtctgggt tgatcacaag acgggcaagt 550
 tttatcttca agacactaaa agtagtaatg gtacttttat aaatagccag 600
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gaagcccggc tccgctcaga tgtcatccat gcaccattac caagtcctgt 800
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cagaagttag ccacgcttca gcggctacta gccatcacc aagaggcttc 950
agataccagt tggcaggctt taatagatga agatagactc ttatcacggt 1000
tagaagttat gggaaaccaa ttacaggcat gctccaaaaa tcaaacagaa 1050
gatagtttac gaaaggaact tatagcatta caagaggata aacataacta 1100
tgagacaaca gccaaagagt ccctgaggcg ggttcttcag gagaaaattg 1150
aagtggttag aaaactttca gaagttgagc gaagtctgag taatactgaa 1200
gatgaatgta cccatctgaa agaaatgaat gaaaggactc aggaagaatt 1250
aagagaatta gccaacaaat ataatggagc agttaatgag attaaagatt 1300
tatctgataa attaaaggta gcagagggaa aacaagagga aatccaacag 1350
aagggacagg ctgagaaaaa agaattacaa cataaaatag atgaaatgga 1400
agaaaaagaa caggagctcc aggcaaaaat agaagctttg caagctgata 1450
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cacagtcctt ttggccaatt aaaacattga gttacaaaag tttgagatac 2350
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agatgagaac agaccttaaa atagctttta cctcaccatc caaataccta 2650
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<210> 26
<211> 296
<212> PRT
<213> Homo Sapien

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<400> 26
Met Glu Ala Arg Leu Arg Ser Asp Val Ile His Ala Pro Leu Pro
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Ser Pro Val Asp Lys Val Ala Ala Asn Thr Pro Ser Met Tyr Ser
                20                      25                      30

Gln Glu Leu Phe Gln Leu Ser Gln Tyr Leu Gln Glu Ala Leu His
                35                      40                      45

Arg Glu Gln Met Leu Glu Gln Lys Leu Ala Thr Leu Gln Arg Leu
                50                      55                      60

Leu Ala Ile Thr Gln Glu Ala Ser Asp Thr Ser Trp Gln Ala Leu
                65                      70                      75

Ile Asp Glu Asp Arg Leu Leu Ser Arg Leu Glu Val Met Gly Asn
                80                      85                      90

Gln Leu Gln Ala Cys Ser Lys Asn Gln Thr Glu Asp Ser Leu Arg
                95                      100                      105

Lys Glu Leu Ile Ala Leu Gln Glu Asp Lys His Asn Tyr Glu Thr
                110                      115                      120

Thr Ala Lys Glu Ser Leu Arg Arg Val Leu Gln Glu Lys Ile Glu
                125                      130                      135

Val Val Arg Lys Leu Ser Glu Val Glu Arg Ser Leu Ser Asn Thr
                140                      145                      150

Glu Asp Glu Cys Thr His Leu Lys Glu Met Asn Glu Arg Thr Gln
                155                      160                      165

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Glu	Glu	Leu	Arg	Glu	Leu	Ala	Asn	Lys	Tyr	Asn	Gly	Ala	Val	Asn	
				170					175					180	
Glu	Ile	Lys	Asp	Leu	Ser	Asp	Lys	Leu	Lys	Val	Ala	Glu	Gly	Lys	
				185					190					195	
Gln	Glu	Glu	Ile	Gln	Gln	Lys	Gly	Gln	Ala	Glu	Lys	Lys	Glu	Leu	
				200					205					210	
Gln	His	Lys	Ile	Asp	Glu	Met	Glu	Glu	Lys	Glu	Gln	Glu	Leu	Gln	
				215					220					225	
Ala	Lys	Ile	Glu	Ala	Leu	Gln	Ala	Asp	Asn	Asp	Phe	Thr	Asn	Glu	
				230					235					240	
Arg	Leu	Thr	Ala	Leu	Gln	Val	Arg	Leu	Glu	His	Leu	Gln	Glu	Lys	
				245					250					255	
Thr	Leu	Lys	Glu	Cys	Ser	Ser	Leu	Ala	Asp	Arg	Arg	Arg	Ala	Ser	
				260					265					270	
Asn	Gln	Ser	Gly	Arg	Arg	Asn	Lys	Ala	Phe	Lys	Arg	Phe	Val	Phe	
				275					280					285	
Cys	Phe	Ser	Met	Phe	Phe	Asp	Ser	Ser	Phe	Gly					
				290					295						

<210> 27
 <211> 2700
 <212> DNA
 <213> Homo Sapien

<400> 27
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 gcccgacggg gtctctgcca tgggggagtg acgcgcctgc acccgctgtt 150
 ccgcggcagc ggcgagacat gaggagaccc cgcgacaggg gcagcggcgg 200
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 gattaacaaa atatattgtg ttactatggt tcaactaaatt tttgaaggct 350
 gtgggacttt tcgaatcata tgatctccta aaagctgttc acattgttca 400
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 actggccttg tggtgtaaag ttgggtttca tacagcttcc agaaagctct 900
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<210> 28
 <211> 765
 <212> PRT
 <213> Homo Sapien

<400> 28
 Met Glu Glu Lys Tyr Gly Gly Asp Val Leu Ala Gly Pro Gly Gly
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 Gly Gly Gly Leu Gly Pro Val Asp Val Pro Ser Ala Arg Leu Thr
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 Lys Tyr Ile Val Leu Leu Cys Phe Thr Lys Phe Leu Lys Ala Val
 35 40 45
 Gly Leu Phe Glu Ser Tyr Asp Leu Leu Lys Ala Val His Ile Val
 50 55 60
 Gln Phe Ile Phe Ile Leu Lys Leu Gly Thr Ala Phe Phe Met Val
 65 70 75
 Leu Phe Gln Lys Pro Phe Ser Ser Gly Lys Thr Ile Thr Lys His
 80 85 90
 Gln Trp Ile Lys Ile Phe Lys His Ala Val Ala Gly Cys Ile Ile
 95 100 105
 Ser Leu Leu Trp Phe Phe Gly Leu Thr Leu Cys Gly Pro Leu Arg
 110 115 120
 Thr Leu Leu Leu Phe Glu His Ser Asp Ile Val Val Ile Ser Leu
 125 130 135
 Leu Ser Val Leu Phe Thr Ser Ser Gly Gly Gly Pro Ala Lys Thr

Tyr	Gly	Val	Leu	Thr	Asn	Ser	Leu	Gly	Leu	Ile	Ser	Asp	Gly	Phe	440	445	450
His	Met	Leu	Phe	Asp	Cys	Ser	Ala	Leu	Val	Met	Gly	Leu	Phe	Ala	455	460	465
Ala	Leu	Met	Ser	Arg	Trp	Lys	Ala	Thr	Arg	Ile	Phe	Ser	Tyr	Gly	470	475	480
Tyr	Gly	Arg	Ile	Glu	Ile	Leu	Ser	Gly	Phe	Ile	Asn	Gly	Leu	Phe	485	490	495
Leu	Ile	Val	Ile	Ala	Phe	Phe	Val	Phe	Met	Glu	Ser	Val	Ala	Arg	500	505	510
Leu	Ile	Asp	Pro	Pro	Glu	Leu	Asp	Thr	His	Met	Leu	Thr	Pro	Val	515	520	525
Ser	Val	Gly	Gly	Leu	Ile	Val	Asn	Leu	Ile	Gly	Ile	Cys	Ala	Phe	530	535	540
Ser	His	Ala	His	Ser	His	Ala	His	Gly	Ala	Ser	Gln	Gly	Ser	Cys	545	550	555
His	Ser	Ser	Asp	His	Ser	His	Ser	His	His	Met	His	Gly	His	Ser	560	565	570
Asp	His	Gly	His	Gly	His	Ser	His	Gly	Ser	Ala	Gly	Gly	Gly	Met	575	580	585
Asn	Ala	Asn	Met	Arg	Gly	Val	Phe	Leu	His	Val	Leu	Ala	Asp	Thr	590	595	600
Leu	Gly	Ser	Ile	Gly	Val	Ile	Val	Ser	Thr	Val	Leu	Ile	Glu	Gln	605	610	615
Phe	Gly	Trp	Phe	Ile	Ala	Asp	Pro	Leu	Cys	Ser	Leu	Ser	Thr	Ala	620	625	630
Ile	Leu	Ile	Phe	Leu	Ser	Val	Val	Pro	Leu	Ile	Lys	Asp	Ala	Cys	635	640	645
Gln	Val	Leu	Leu	Leu	Arg	Leu	Pro	Pro	Glu	Tyr	Glu	Lys	Glu	Leu	650	655	660
His	Ile	Ala	Leu	Glu	Lys	Ile	Gln	Lys	Ile	Glu	Gly	Leu	Ile	Ser	665	670	675
Tyr	Arg	Asp	Pro	His	Phe	Trp	Arg	His	Ser	Ala	Ser	Ile	Val	Ala	680	685	690
Gly	Thr	Ile	His	Ile	Gln	Val	Thr	Ser	Asp	Val	Leu	Glu	Gln	Arg	695	700	705
Ile	Val	Gln	Gln	Val	Thr	Gly	Ile	Leu	Lys	Asp	Ala	Gly	Val	Asn	710	715	720
Asn	Leu	Thr	Ile	Gln	Val	Glu	Lys	Glu	Ala	Tyr	Phe	Gln	His	Met			

	725		730		735
Ser Gly Leu Ser Thr Gly Phe His Asp Val Leu Ala Met Thr Lys					
	740		745		750
Gln Met Glu Ser Met Lys Tyr Cys Lys Asp Gly Thr Tyr Ile Met					
	755		760		765

<210> 29
 <211> 1701
 <212> DNA
 <213> Homo Sapien

<400> 29
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 agaaggcctt tcacaagttg gccatgaagt accaccctga caaaaataag 200
 agcccggatg ctgaagcaaa attcagagag attgcagaag catatgaaac 250
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 tttgttttcg gatagactta tttcttttagt tctgcacttt tccacattat 1650
 actccatatg agtattaatc ctatggatac atattaaaac aagtgtctca 1700
 t 1701

<210> 30
 <211> 223
 <212> PRT
 <213> Homo Sapien

<400> 30
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 1 5 10 15
 Met Ile Thr Glu Leu Ile Leu Ala Ser Lys Ser Tyr Tyr Asp Ile
 20 25 30
 Leu Gly Val Pro Lys Ser Ala Ser Glu Arg Gln Ile Lys Lys Ala
 35 40 45
 Phe His Lys Leu Ala Met Lys Tyr His Pro Asp Lys Asn Lys Ser
 50 55 60
 Pro Asp Ala Glu Ala Lys Phe Arg Glu Ile Ala Glu Ala Tyr Glu
 65 70 75
 Thr Leu Ser Asp Ala Asn Arg Arg Lys Glu Tyr Asp Thr Leu Gly
 80 85 90
 His Ser Ala Phe Thr Ser Gly Lys Gly Gln Arg Gly Ser Gly Ser
 95 100 105
 Ser Phe Glu Gln Ser Phe Asn Phe Asn Phe Asp Asp Leu Phe Lys
 110 115 120
 Asp Phe Gly Phe Phe Gly Gln Asn Gln Asn Thr Gly Ser Lys Lys
 125 130 135

Arg	Phe	Glu	Asn	His	Phe	Gln	Thr	Arg	Gln	Asp	Gly	Gly	Ser	Ser	
				140					145					150	
Arg	Gln	Arg	His	His	Phe	Gln	Glu	Phe	Ser	Phe	Gly	Gly	Gly	Leu	
				155					160					165	
Phe	Asp	Asp	Met	Phe	Glu	Asp	Met	Glu	Lys	Met	Phe	Ser	Phe	Ser	
				170					175					180	
Gly	Phe	Asp	Ser	Thr	Asn	Gln	His	Thr	Val	Gln	Thr	Glu	Asn	Arg	
				185					190					195	
Phe	His	Gly	Ser	Ser	Lys	His	Cys	Arg	Thr	Val	Thr	Gln	Arg	Arg	
				200					205					210	
Gly	Asn	Met	Val	Thr	Thr	Tyr	Thr	Asp	Cys	Ser	Gly	Gln			
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<210> 31
 <211> 2056
 <212> DNA
 <213> Homo Sapien

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<210> 32
 <211> 311
 <212> PRT
 <213> Homo Sapien

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<210> 33
 <211> 2531
 <212> DNA
 <213> Homo Sapien

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<210> 34
<211> 328
<212> PRT
<213> Homo Sapien

<400> 34

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Gly	Trp	Trp	Ala	Tyr	Lys	Glu	Val	Val	Gln	Gly	Ser	Phe	Val	Pro	35	40	45	
Val	Pro	Ser	Phe	Trp	Gly	Leu	Val	Asn	Ser	Ala	Trp	Asn	Leu	Cys	50	55	60	
Ser	Val	Gly	Lys	Arg	Gln	Ser	Pro	Val	Asn	Ile	Glu	Thr	Ser	His	65	70	75	
Met	Ile	Phe	Asp	Pro	Phe	Leu	Thr	Pro	Leu	Arg	Ile	Asn	Thr	Gly	80	85	90	
Gly	Arg	Lys	Val	Ser	Gly	Thr	Met	Tyr	Asn	Thr	Gly	Arg	His	Val	95	100	105	
Ser	Leu	Arg	Leu	Asp	Lys	Glu	His	Leu	Val	Asn	Ile	Ser	Gly	Gly	110	115	120	
Pro	Met	Thr	Tyr	Ser	His	Arg	Leu	Glu	Glu	Ile	Arg	Leu	His	Phe	125	130	135	
Gly	Ser	Glu	Asp	Ser	Gln	Gly	Ser	Glu	His	Leu	Leu	Asn	Gly	Gln	140	145	150	
Ala	Phe	Ser	Gly	Glu	Val	Gln	Leu	Ile	His	Tyr	Asn	His	Glu	Leu	155	160	165	
Tyr	Thr	Asn	Val	Thr	Glu	Ala	Ala	Lys	Ser	Pro	Asn	Gly	Leu	Val	170	175	180	
Val	Val	Ser	Ile	Phe	Ile	Lys	Val	Ser	Asp	Ser	Ser	Asn	Pro	Phe	185	190	195	
Leu	Asn	Arg	Met	Leu	Asn	Arg	Asp	Thr	Ile	Thr	Arg	Ile	Thr	Tyr	200	205	210	
Lys	Asn	Asp	Ala	Tyr	Leu	Leu	Gln	Gly	Leu	Asn	Ile	Glu	Glu	Leu	215	220	225	
Tyr	Pro	Glu	Thr	Ser	Ser	Phe	Ile	Thr	Tyr	Asp	Gly	Ser	Met	Thr	230	235	240	
Ile	Pro	Pro	Cys	Tyr	Glu	Thr	Ala	Ser	Trp	Ile	Ile	Met	Asn	Lys	245	250	255	
Pro	Val	Tyr	Ile	Thr	Arg	Met	Gln	Met	His	Ser	Leu	Arg	Leu	Leu	260	265	270	
Ser	Gln	Asn	Gln	Pro	Ser	Gln	Ile	Phe	Leu	Ser	Met	Ser	Asp	Asn	275	280	285	
Phe	Arg	Pro	Val	Gln	Pro	Leu	Asn	Asn	Arg	Cys	Ile	Arg	Thr	Asn				

	290	295	300
Ile Asn Phe Ser Leu Gln Gly Lys Asp Cys Pro Asn Asn Arg Ala			
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Gln Lys Leu Gln Tyr Arg Val Asn Glu Trp Leu Leu Lys			
	320	325	

<210> 35
 <211> 3371
 <212> DNA
 <213> Homo Sapien

<400> 35
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Val	Asn	Val	Gln	Val	Ile	Tyr	Leu	Tyr	Glu	Asn	Asp	Leu	Asp	Glu
				110					115					120
Phe	Pro	Ile	Asn	Leu	Pro	Arg	Ser	Leu	Arg	Glu	Leu	His	Leu	Gln
				125					130					135
Asp	Asn	Asn	Val	Arg	Thr	Ile	Ala	Arg	Asp	Ser	Leu	Ala	Arg	Ile
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Pro	Leu	Leu	Glu	Lys	Leu	His	Leu	Asp	Asp	Asn	Ser	Val	Ser	Thr
				155					160					165
Val	Ser	Ile	Glu	Glu	Asp	Ala	Phe	Ala	Asp	Ser	Lys	Gln	Leu	Lys
				170					175					180
Leu	Leu	Phe	Leu	Ser	Arg	Asn	His	Leu	Ser	Ser	Ile	Pro	Ser	Gly
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Leu	Pro	His	Thr	Leu	Glu	Glu	Leu	Arg	Leu	Asp	Asp	Asn	Arg	Ile
				200					205					210
Ser	Thr	Ile	Pro	Leu	His	Ala	Phe	Lys	Gly	Leu	Asn	Ser	Leu	Arg
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Arg	Leu	Val	Leu	Asp	Gly	Asn	Leu	Leu	Ala	Asn	Gln	Arg	Ile	Ala
				230					235					240
Asp	Asp	Thr	Phe	Ser	Arg	Leu	Gln	Asn	Leu	Thr	Glu	Leu	Ser	Leu
				245					250					255
Val	Arg	Asn	Ser	Leu	Ala	Ala	Pro	Pro	Leu	Asn	Leu	Pro	Ser	Ala
				260					265					270
His	Leu	Gln	Lys	Leu	Tyr	Leu	Gln	Asp	Asn	Ala	Ile	Ser	His	Ile
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Pro	Tyr	Asn	Thr	Leu	Ala	Lys	Met	Arg	Glu	Leu	Glu	Arg	Leu	Asp
				290					295					300
Leu	Ser	Asn	Asn	Asn	Leu	Thr	Thr	Leu	Pro	Arg	Gly	Leu	Phe	Asp
				305					310					315
Asp	Leu	Gly	Asn	Leu	Ala	Gln	Leu	Leu	Leu	Arg	Asn	Asn	Pro	Trp
				320					325					330
Phe	Cys	Gly	Cys	Asn	Leu	Met	Trp	Leu	Arg	Asp	Trp	Val	Lys	Ala
				335					340					345
Arg	Ala	Ala	Val	Val	Asn	Val	Arg	Gly	Leu	Met	Cys	Gln	Gly	Pro
				350					355					360
Glu	Lys	Val	Arg	Gly	Met	Ala	Ile	Lys	Asp	Ile	Thr	Ser	Glu	Met
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<210> 37
<211> 3501
<212> DNA
<213> Homo Sapien

<220>
<221> unsure
<222> 2762, 2778
<223> unknown base

<400> 37
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<210> 38
<211> 1013
<212> PRT
<213> Homo Sapien

<220>
<221> unsure
<222> 877, 882
<223> unknown amino acid

<400> 38
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Arg Arg Thr Glu Arg Arg Ile Pro Arg Leu Trp Arg Leu Leu Leu
20 25 30
Trp Ala Gly Thr Ala Phe Gln Val Thr Gln Gly Thr Gly Pro Glu
35 40 45
Leu His Ala Cys Lys Glu Ser Glu Tyr His Tyr Glu Tyr Thr Ala
50 55 60

Cys	Asp	Ser	Thr	Gly	Ser	Arg	Trp	Arg	Val	Ala	Val	Pro	His	Thr	
				65					70					75	
Pro	Gly	Leu	Cys	Thr	Ser	Leu	Ser	Asp	Pro	Val	Lys	Gly	Thr	Glu	
				80					85					90	
Cys	Ser	Phe	Ser	Cys	Asn	Ala	Gly	Glu	Phe	Leu	Asp	Met	Lys	Asp	
				95					100					105	
Gln	Ser	Cys	Lys	Pro	Cys	Ala	Glu	Gly	Arg	Tyr	Ser	Leu	Gly	Thr	
				110					115					120	
Gly	Ile	Arg	Phe	Asp	Glu	Trp	Asp	Glu	Leu	Pro	His	Gly	Phe	Ala	
				125					130					135	
Ser	Leu	Ser	Ala	Asn	Met	Glu	Leu	Asp	Asp	Ser	Ala	Ala	Glu	Ser	
				140					145					150	
Thr	Gly	Asn	Cys	Thr	Ser	Ser	Lys	Trp	Val	Pro	Arg	Gly	Asp	Tyr	
				155					160					165	
Ile	Ala	Ser	Asn	Thr	Asp	Glu	Cys	Thr	Ala	Thr	Leu	Met	Tyr	Ala	
				170					175					180	
Val	Asn	Leu	Lys	Gln	Ser	Gly	Thr	Val	Asn	Phe	Glu	Tyr	Tyr	Tyr	
				185					190					195	
Pro	Asp	Ser	Ser	Ile	Ile	Phe	Glu	Phe	Phe	Val	Gln	Asn	Asp	Gln	
				200					205					210	
Cys	Gln	Pro	Asn	Ala	Asp	Asp	Ser	Arg	Trp	Met	Lys	Thr	Thr	Glu	
				215					220					225	
Lys	Gly	Trp	Glu	Phe	His	Ser	Val	Glu	Leu	Asn	Arg	Gly	Asn	Asn	
				230					235					240	
Val	Leu	Tyr	Trp	Arg	Thr	Thr	Ala	Phe	Ser	Val	Trp	Thr	Lys	Val	
				245					250					255	
Pro	Lys	Pro	Val	Leu	Val	Arg	Asn	Ile	Ala	Ile	Thr	Gly	Val	Ala	
				260					265					270	
Tyr	Thr	Ser	Glu	Cys	Phe	Pro	Cys	Lys	Pro	Gly	Thr	Tyr	Ala	Asp	
				275					280					285	
Lys	Gln	Gly	Ser	Ser	Phe	Cys	Lys	Leu	Cys	Pro	Ala	Asn	Ser	Tyr	
				290					295					300	
Ser	Asn	Lys	Gly	Glu	Thr	Ser	Cys	His	Gln	Cys	Asp	Pro	Asp	Lys	
				305					310					315	
Tyr	Ser	Glu	Lys	Gly	Ser	Ser	Ser	Cys	Asn	Val	Arg	Pro	Ala	Cys	
				320					325					330	
Thr	Asp	Lys	Asp	Tyr	Phe	Tyr	Thr	His	Thr	Ala	Cys	Asp	Ala	Asn	
				335					340					345	
Gly	Glu	Thr	Gln	Leu	Met	Tyr	Lys	Trp	Ala	Lys	Pro	Lys	Ile	Cys	

Lys	Asn	Asn	Lys	Ile	His	Ser	Leu	Cys	Tyr	Asn	Asp	Cys	Thr	Phe	650	655	660
Ser	Arg	Asn	Thr	Pro	Thr	Arg	Thr	Phe	Asn	Tyr	Asn	Phe	Ser	Ala	665	670	675
Leu	Ala	Asn	Thr	Val	Thr	Leu	Ala	Gly	Gly	Pro	Ser	Phe	Thr	Ser	680	685	690
Lys	Gly	Leu	Lys	Tyr	Phe	His	His	Phe	Thr	Leu	Ser	Leu	Cys	Gly	695	700	705
Asn	Gln	Gly	Arg	Lys	Met	Ser	Val	Cys	Thr	Asp	Asn	Val	Thr	Asp	710	715	720
Leu	Arg	Ile	Pro	Glu	Gly	Glu	Ser	Gly	Phe	Ser	Lys	Ser	Ile	Thr	725	730	735
Ala	Tyr	Val	Cys	Gln	Ala	Val	Ile	Ile	Pro	Pro	Glu	Val	Thr	Gly	740	745	750
Tyr	Lys	Ala	Gly	Val	Ser	Ser	Gln	Pro	Val	Ser	Leu	Ala	Asp	Arg	755	760	765
Leu	Ile	Gly	Val	Thr	Thr	Asp	Met	Thr	Leu	Asp	Gly	Ile	Thr	Ser	770	775	780
Pro	Ala	Glu	Leu	Phe	His	Leu	Glu	Ser	Leu	Gly	Ile	Pro	Asp	Val	785	790	795
Ile	Phe	Phe	Tyr	Arg	Ser	Asn	Asp	Val	Thr	Gln	Ser	Cys	Ser	Ser	800	805	810
Gly	Arg	Ser	Thr	Thr	Ile	Arg	Val	Arg	Cys	Ser	Pro	Gln	Lys	Thr	815	820	825
Val	Pro	Gly	Ser	Leu	Leu	Leu	Pro	Gly	Thr	Cys	Ser	Asp	Gly	Thr	830	835	840
Cys	Asp	Gly	Cys	Asn	Phe	His	Phe	Leu	Trp	Glu	Ser	Ala	Ala	Ala	845	850	855
Cys	Pro	Leu	Cys	Ser	Val	Ala	Asp	Tyr	His	Ala	Ile	Val	Ser	Ser	860	865	870
Cys	Val	Ala	Gly	Ile	Gln	Xaa	Thr	Thr	Tyr	Val	Xaa	Arg	Glu	Pro	875	880	885
Lys	Leu	Cys	Ser	Gly	Gly	Ile	Ser	Leu	Pro	Glu	Gln	Arg	Val	Thr	890	895	900
Ile	Cys	Lys	Thr	Ile	Asp	Phe	Trp	Leu	Lys	Val	Gly	Ile	Ser	Ala	905	910	915
Gly	Thr	Cys	Thr	Ala	Ile	Leu	Leu	Thr	Val	Leu	Thr	Cys	Tyr	Phe	920	925	930
Trp	Lys	Lys	Asn	Gln	Lys	Leu	Glu	Tyr	Lys	Tyr	Ser	Lys	Leu	Val			

	935		940		945
Met Asn Ala Thr	Leu Lys Asp Cys Asp	Leu Pro Ala Ala Asp	Ser		
	950		955		960
Cys Ala Ile Met	Glu Gly Glu Asp Val	Glu Asp Asp Leu Ile	Phe		
	965		970		975
Thr Ser Lys Lys	Ser Leu Phe Gly Lys	Ile Lys Ser Phe Thr	Ser		
	980		985		990
Lys Arg Thr Pro	Asp Gly Phe Asp Ser Val	Pro Leu Lys Thr	Ser		
	995		1000		1005
Ser Gly Gly Pro	Asp Met Asp Leu				
	1010				

<210> 39
 <211> 2998
 <212> DNA
 <213> Homo Sapien

<400> 39
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 atgaggtagc ggccaggctg atcaccctg cgttggtgagg aggcagaatt 150
 ctgtaaatacc tcgccaagtc tttctccagg ccaactgggta gctcatctca 200
 gcctcctctg ggagcatcaa caccaacatg gcacagggga ctgcagtggg 250
 gtgcttttga cctgtgtacc cacccaaggc taaaggcaga gccaggtgac 300
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 agattatggt ggcaggaaga atgttggcat tgattggcac gcaggggacg 500
 agagctgctt tgtgctttaa aggagccaag ttacaccctg ttttaaccctg 550
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<210> 40

<211> 621

<212> PRT

<213> Homo Sapien

<400> 40

Met	Pro	Phe	Thr	Leu	His	Leu	Arg	Ser	Arg	Leu	Pro	Ser	Ala	Ile
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Arg	Ser	Leu	Ile	Leu	Gln	Lys	Lys	Pro	Asn	Ile	Arg	Asn	Thr	Ser
				20					25					30
Ser	Met	Ala	Gly	Glu	Leu	Arg	Pro	Ala	Ser	Leu	Val	Val	Leu	Pro
				35					40					45
Arg	Ser	Leu	Ala	Pro	Ala	Phe	Glu	Arg	Phe	Cys	Gln	Val	Asn	Thr
				50					55					60
Gly	Pro	Leu	Pro	Leu	Leu	Gly	Gln	Ser	Glu	Pro	Glu	Lys	Trp	Met
				65					70					75
Leu	Pro	Pro	Gln	Gly	Ala	Ile	Ser	Glu	Thr	Arg	Met	Gly	His	Pro
				80					85					90
Gln	Phe	Trp	Lys	Tyr	Glu	Phe	Gly	Ala	Cys	Thr	Gly	Ser	Leu	Ala
				95					100					105
Ser	Leu	Glu	Gln	Tyr	Ser	Glu	Gln	Leu	Lys	Asp	Met	Val	Ala	Phe
				110					115					120
Phe	Leu	Gly	Cys	Ser	Phe	Ser	Leu	Glu	Glu	Ala	Leu	Glu	Lys	Ala
				125					130					135

Gly	Leu	Pro	Arg	Arg	Asp	Pro	Ala	Gly	His	Ser	Gln	Ala	Gly	Ala	140	145	150
Tyr	Lys	Thr	Thr	Val	Pro	Cys	Val	Thr	His	Ala	Gly	Phe	Cys	Cys	155	160	165
Pro	Leu	Val	Val	Thr	Met	Arg	Pro	Ile	Pro	Lys	Asp	Lys	Leu	Glu	170	175	180
Gly	Leu	Val	Arg	Ala	Cys	Cys	Ser	Leu	Gly	Gly	Glu	Gln	Gly	Gln	185	190	195
Pro	Val	His	Met	Gly	Asp	Pro	Glu	Leu	Leu	Gly	Ile	Lys	Glu	Leu	200	205	210
Ser	Lys	Pro	Ala	Tyr	Gly	Asp	Ala	Met	Val	Cys	Pro	Pro	Gly	Glu	215	220	225
Val	Pro	Val	Phe	Trp	Pro	Ser	Pro	Leu	Thr	Ser	Leu	Gly	Ala	Val	230	235	240
Ser	Ser	Cys	Glu	Thr	Pro	Leu	Ala	Phe	Ala	Ser	Ile	Pro	Gly	Cys	245	250	255
Thr	Val	Met	Thr	Asp	Leu	Lys	Asp	Ala	Lys	Ala	Pro	Pro	Gly	Cys	260	265	270
Leu	Thr	Pro	Glu	Arg	Ile	Pro	Glu	Val	His	His	Ile	Ser	Gln	Asp	275	280	285
Pro	Leu	His	Tyr	Ser	Ile	Ala	Ser	Val	Ser	Ala	Ser	Gln	Lys	Ile	290	295	300
Arg	Glu	Leu	Glu	Ser	Met	Ile	Gly	Ile	Asp	Pro	Gly	Asn	Arg	Gly	305	310	315
Ile	Gly	His	Leu	Leu	Cys	Lys	Asp	Glu	Leu	Leu	Lys	Ala	Ser	Leu	320	325	330
Ser	Leu	Ser	His	Ala	Arg	Ser	Val	Leu	Ile	Thr	Thr	Gly	Phe	Pro	335	340	345
Thr	His	Phe	Asn	His	Glu	Pro	Pro	Glu	Glu	Thr	Asp	Gly	Pro	Pro	350	355	360
Gly	Ala	Val	Ala	Leu	Val	Ala	Phe	Leu	Gln	Ala	Leu	Glu	Lys	Glu	365	370	375
Val	Ala	Ile	Ile	Val	Asp	Gln	Arg	Ala	Trp	Asn	Leu	His	Gln	Lys	380	385	390
Ile	Val	Glu	Asp	Ala	Val	Glu	Gln	Gly	Val	Leu	Lys	Thr	Gln	Ile	395	400	405
Pro	Ile	Leu	Thr	Tyr	Gln	Gly	Gly	Ser	Val	Glu	Ala	Ala	Gln	Ala	410	415	420
Phe	Leu	Cys	Lys	Asn	Gly	Asp	Pro	Gln	Thr	Pro	Arg	Phe	Asp	His			

Leu Val Ala Ile Glu Arg Ala Gly Arg Ala Ala Asp Gly Asn Tyr
440 445 450

Tyr Asn Ala Arg Lys Met Asn Ile Lys His Leu Val Asp Pro Ile
455 460 465

Asp Asp Leu Phe Leu Ala Ala Lys Lys Ile Pro Gly Ile Ser Ser
470 475 480

Thr Gly Val Gly Asp Gly Gly Asn Glu Leu Gly Met Gly Lys Val
485 490 495

Lys Glu Ala Val Arg Arg His Ile Arg His Gly Asp Val Ile Ala
500 505 510

Cys Asp Val Glu Ala Asp Phe Ala Val Ile Ala Gly Val Ser Asn
515 520 525

Trp Gly Gly Tyr Ala Leu Ala Cys Ala Leu Tyr Ile Leu Tyr Ser
530 535 540

Cys Ala Val His Ser Gln Tyr Leu Arg Lys Ala Val Gly Pro Ser
545 550 555

Arg Ala Pro Gly Asp Gln Ala Trp Thr Gln Ala Leu Pro Ser Val
560 565 570

Ile Lys Glu Glu Lys Met Leu Gly Ile Leu Val Gln His Lys Val
575 580 585

Arg Ser Gly Val Ser Gly Ile Val Gly Met Glu Val Asp Gly Leu
590 595 600

Pro Phe His Asn Thr His Ala Glu Met Ile Gln Lys Leu Val Asp
605 610 615

Val Thr Thr Ala Gln Val
620

<210> 41
<211> 889
<212> DNA
<213> Homo Sapien

<400> 41
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attctgtaac ctgacactca tctggccctt tgcagtttgc cagccatatt 100
cccatgtgat ttcccactgg atccaggccc ccatccggct ggcaggaggg 150
ggctctgacg tacaggttgg aaatcagaag tctgtgagag cgcgaggagt 200
catggcagct ctgggtccca gacctggccc gacctctctg cttcacctcc 250
agctctgctg ctctctact cttgggtcga gatccctttg gagccacagc 300

gaggaaccct gtggtcctca ggcaggtgta ccttgagtca gccaggagcc 350
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ccctccaaga tgccccctgcc ctcagtttcc cctcatgata tggcctctgc 450
cccccttctt agccacagcc tctagtagac tttagcaata ccaccagact 500
agttagagtt cccactcac caagcaagac atgcagtttc atgcctctgt 550
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ctgccttgtc tgccctggcaa gttcatctct cactatcccc tcaaaggccc 650
cctcctccag gaaggcaacc cctgtgcccc tccccctcag gctacctctg 700
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cagtaggcgc tcaataaatg ttgaatgaat gaatgattt 889

<210> 42

<211> 83

<212> PRT

<213> Homo Sapien

<400> 42

Met	Gln	Phe	His	Ala	Ser	Val	Pro	Ser	Leu	Met	Leu	Phe	Leu	Pro
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Thr	Gly	Met	Pro	Ser	Pro	Ala	Pro	Pro	Ala	Leu	Ser	Ala	Trp	Gln
				20					25					30
Val	His	Leu	Ser	Arg	Ser	Pro	Gln	Arg	Pro	Pro	Pro	Pro	Gly	Arg
				35					40					45
Gln	Pro	Leu	Cys	Pro	Ser	Pro	Pro	Gly	Tyr	Leu	Cys	Thr	Leu	Ser
				50					55					60
Met	Leu	Leu	Leu	Trp	His	Leu	Ser	His	Cys	Ile	Leu	Leu	Val	Tyr
				65					70					75
Met	Phe	Val	Ser	Pro	Ser	Arg	Leu							
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<210> 43

<211> 1356

<212> DNA

<213> Homo Sapien

<400> 43

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acctcctacg agatgatgat gcagtgtgtg tcccgcatgt tggccccacc 100

Met	Met	Met	Gln	Cys	Val	Ser	Arg	Met	Leu	Ala	His	Pro	Leu	His
1				5					10					15
Val	Ile	Ser	Met	Arg	Cys	Met	Val	Gln	Phe	Val	Gly	Arg	Glu	Ala
				20					25					30
Lys	Tyr	Ser	Gly	Val	Leu	Ser	Ser	Ile	Gly	Lys	Ile	Phe	Lys	Glu
				35					40					45
Glu	Gly	Leu	Leu	Gly	Phe	Phe	Val	Gly	Leu	Ile	Pro	His	Leu	Leu
				50					55					60
Gly	Asp	Val	Val	Phe	Leu	Trp	Gly	Cys	Asn	Leu	Leu	Ala	His	Phe
				65					70					75
Ile	Asn	Ala	Tyr	Leu	Val	Asp	Asp	Ser	Phe	Ser	Gln	Ala	Leu	Ala
				80					85					90
Ile	Arg	Ser	Tyr	Thr	Lys	Phe	Val	Met	Gly	Ile	Ala	Val	Ser	Met
				95					100					105
Leu	Thr	Tyr	Pro	Phe	Leu	Leu	Val	Gly	Asp	Leu	Met	Ala	Val	Asn
				110					115					120
Asn	Cys	Gly	Leu	Gln	Ala	Gly	Leu	Pro	Pro	Tyr	Ser	Pro	Val	Phe
				125					130					135
Lys	Ser	Trp	Ile	His	Cys	Trp	Lys	Tyr	Leu	Ser	Val	Gln	Gly	Gln
				140					145					150
Leu	Phe	Arg	Gly	Ser	Ser	Leu	Leu	Phe	Arg	Arg	Val	Ser	Ser	Gly
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Ser	Cys	Phe	Ala	Leu	Glu									
				170										

<210> 45
 <211> 2237
 <212> DNA
 <213> Homo Sapien

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<211> 586

<212> PRT

<213> Homo Sapien

<400> 46

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Lys	Asn	Lys	Gly	Phe	Ser	Val	Ala	Ser	Thr	Val	Gln	Ser	His	Thr
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Lys	Gly	Ile	Trp	Ile	Trp	Cys	Val	Pro	His	Pro	Asn	Trp	Pro	Asn
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His	Thr	Leu	Val	Leu	Leu	Asp	Thr	Glu	Gly	Leu	Gly	Asp	Val	Glu
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Lys	Ala	Asp	Asn	Lys	Asn	Asp	Ile	Gln	Ile	Phe	Ala	Leu	Ala	Leu
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Leu	Leu	Ser	Ser	Thr	Phe	Val	Tyr	Asn	Thr	Val	Asn	Lys	Ile	Asp
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Gln	Gly	Ala	Ile	Asp	Leu	Leu	His	Asn	Val	Thr	Glu	Leu	Thr	Asp
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Leu	Leu	Lys	Ala	Arg	Asn	Ser	Pro	Asp	Leu	Asp	Arg	Val	Glu	Asp
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Pro	Ala	Asp	Ser	Ala	Ser	Phe	Phe	Pro	Asp	Leu	Val	Trp	Thr	Leu
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Arg	Asp	Phe	Cys	Leu	Gly	Leu	Glu	Ile	Asp	Gly	Gln	Leu	Val	Thr
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Pro	Asp	Glu	Tyr	Leu	Glu	Asn	Ser	Leu	Arg	Pro	Lys	Gln	Gly	Ser
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Asp	Gln	Arg	Val	Gln	Asn	Phe	Asn	Leu	Pro	Arg	Leu	Cys	Ile	Gln
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Lys	Phe	Phe	Pro	Lys	Lys	Lys	Cys	Phe	Ile	Phe	Asp	Leu	Pro	Ala
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His	Gln	Lys	Lys	Leu	Ala	Gln	Leu	Glu	Thr	Leu	Pro	Asp	Asp	Glu
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Leu	Glu	Pro	Glu	Phe	Val	Gln	Gln	Val	Thr	Glu	Phe	Cys	Ser	Tyr
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Val	Asn	Gly	Ser	Arg	Leu	Lys	Asn	Leu	Val	Leu	Thr	Tyr	Val	Asn
				290					295					300
Ala	Ile	Ser	Ser	Gly	Asp	Leu	Pro	Cys	Ile	Glu	Asn	Ala	Val	Leu
				305					310					315
Ala	Leu	Ala	Gln	Arg	Glu	Asn	Ser	Ala	Ala	Val	Gln	Lys	Ala	Ile
				320					325					330
Ala	His	Tyr	Asp	Gln	Gln	Met	Gly	Gln	Lys	Val	Gln	Leu	Pro	Met
				335					340					345
Glu	Thr	Leu	Gln	Glu	Leu	Leu	Asp	Leu	His	Arg	Thr	Ser	Glu	Arg
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Glu	Ala	Ile	Glu	Val	Phe	Met	Lys	Asn	Ser	Phe	Lys	Asp	Val	Asp
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Gln	Ser	Phe	Gln	Lys	Glu	Leu	Glu	Thr	Leu	Leu	Asp	Ala	Lys	Gln
				380					385					390
Asn	Asp	Ile	Cys	Lys	Arg	Asn	Leu	Glu	Ala	Ser	Ser	Asp	Tyr	Cys
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Ser	Ala	Leu	Leu	Lys	Asp	Ile	Phe	Gly	Pro	Leu	Glu	Glu	Ala	Val
				410					415					420
Lys	Gln	Gly	Ile	Tyr	Ser	Lys	Pro	Gly	Gly	His	Asn	Leu	Phe	Ile
				425					430					435
Gln	Lys	Thr	Glu	Glu	Leu	Lys	Ala	Lys	Tyr	Tyr	Arg	Glu	Pro	Arg
				440					445					450
Lys	Gly	Ile	Gln	Ala	Glu	Glu	Val	Leu	Gln	Lys	Tyr	Leu	Lys	Ser
				455					460					465
Lys	Glu	Ser	Val	Ser	His	Ala	Ile	Leu	Gln	Thr	Asp	Gln	Ala	Leu

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Asn Glu Gln Met Met Gln Glu Arg Glu Arg Leu His Gln Glu Gln					
	515		520		525
Val Arg Gln Met Glu Ile Ala Lys Gln Asn Trp Leu Ala Glu Gln					
	530		535		540
Gln Lys Met Gln Glu Gln Gln Met Gln Glu Gln Ala Ala Gln Leu					
	545		550		555
Ser Thr Thr Phe Gln Ala Gln Asn Arg Ser Leu Leu Ser Glu Leu					
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Gln His Ala Gln Arg Ala Val Asn Asn Asp Asp Pro Cys Val Leu					
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 <212> DNA
 <213> Homo Sapien

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Gln	Ser	Phe	Ser	Glu	Leu	Ser	Gln	Ser	Leu	Met	Arg	Pro	Gly	Phe	
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Leu	Gln	Met	Pro	Tyr	Ile	Ser	Cys	Ala	Lys	Leu	Ser	Lys	Ile	Trp	
				65					70					75	
Phe	Pro	Ala	Ser	Lys	Pro	Cys	Leu	Leu	Ala	Phe	Leu	Glu	Val	Phe	
				80					85					90	
Leu	Leu	Met	Ser	Arg	Leu	Ser	Leu	Phe	Ser	Lys	Met	Ile	Cys	Phe	
				95					100					105	
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 <211> 3719
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<212> PRT

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Ala	Ser	Thr	Gly	Gln	Gly	Pro	Arg	Cys	Arg	Glu	Ser	Pro	Gly	Leu
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Leu	Val	Val	Ser	Gly	Gly	Lys	Thr	Asn	Ser	Leu	Gly	Gln	Gly	Arg
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Pro	Pro	Thr	Pro	Arg	Pro	Leu	Glu	Asn	Gly	His	Gly	Gly	Arg	Ser
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Leu	Gly	Pro	Gly	Pro	Leu	Asp	Trp	Val	Glu	Met	Pro	Asp	His	Gln
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Arg	His	Pro	Ser	Thr	Ala	Pro	Pro	Thr	Asp	Leu	Thr	Ser	His	Leu
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Ser	Arg	Ile	Ser	Leu	Ala	Gly	Val	Glu	Pro	Ser	Leu	Val	Gln	Ala
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Ala	Leu	Gly	Gln	Leu	Val	Arg	Leu	Ser	Cys	Ser	Asp	Asp	Thr	Ala
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Pro	Glu	Ser	Gln	Ala	Ala	Trp	Gln	Lys	Asp	Gly	Gln	Pro	Ile	Ser
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Ser	Asp	Arg	His	Arg	Leu	Gln	Phe	Asp	Gly	Ser	Leu	Ile	Ile	His
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Pro	Leu	Gln	Ala	Glu	Asp	Ala	Gly	Thr	Tyr	Ser	Cys	Gly	Ser	Thr
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Arg	Pro	Gly	Arg	Asp	Ser	Gln	Lys	Ile	Gln	Leu	Arg	Ile	Ile	Gly
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Gly	Asp	Met	Ala	Val	Leu	Ser	Glu	Ala	Glu	Leu	Ser	Arg	Phe	Pro
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Gly	Pro	Leu	Gly	Ala	Ile	Pro	Ser	Ser	His	Pro	Gln	Pro	Ala	Asn
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Arg	Leu	Arg	Leu	Asp	Gln	Asn	Gln	Pro	Arg	Val	Val	Asp	Ala	Ser
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Pro	Pro	Ala	Ile	Glu	Trp	Gln	Arg	Asp	Gly	Gln	Pro	Val	Ser	Ser
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Pro	Arg	His	Gln	Leu	Gln	Pro	Asp	Gly	Ser	Leu	Val	Ile	Ser	Arg
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Val	Ala	Val	Glu	Asp	Gly	Gly	Phe	Tyr	Thr	Cys	Val	Ala	Phe	Asn
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Glu	Leu	Thr	Ile	Ser	Gly	Leu	Pro	Pro	Thr	Val	Thr	Val	Pro	Glu
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His	Arg	Val	His	Gln	Ser	Pro	Asp	Gly	Thr	Leu	Leu	Ile	Tyr	Asn
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Pro	Ala	Pro	Thr	Ala	Gln	Pro	Arg	Asp	Pro	Gly	Arg	Asp	Cys	Val
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Asp	Gln	Pro	Glu	Leu	Ala	Asn	Cys	Asp	Leu	Ile	Leu	Gln	Ala	Gln
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 <212> DNA
 <213> Homo Sapien

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 Gly Cys Gly Phe Arg Arg Ala Arg Pro Lys Phe Glu Gln Val Asn
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 140 145 150
 Thr Lys Leu Asp Gly Glu Lys Ala Val Leu Glu Asn Asn Leu Gly
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Gly	Asn	Glu	Gln	Met	Thr	Lys	Tyr	Glu	Met	Ala	Cys	Ala	Ile	Ala
				245					250					255
Asp	Ala	Phe	Asn	Leu	Pro	Ser	Ser	His	Leu	Arg	Pro	Ile	Thr	Asp
				260					265					270
Ser	Pro	Val	Leu	Gly	Ala	Gln	Arg	Pro	Arg	Asn	Ala	Gln	Leu	Asp
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Cys	Ser	Lys	Leu	Glu	Thr	Leu	Gly	Ile	Gly	Gln	Arg	Thr	Pro	Phe
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Arg	Ile	Gly	Ile	Lys	Glu	Ser	Leu	Trp	Pro	Phe	Leu	Ile	Asp	Lys
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<211> 4372

<212> DNA

<213> Homo Sapien

<400> 53

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 <212> PRT
 <213> Homo Sapien

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 35 40 45
 Leu Pro Met Asp Thr Arg Asn Leu Ser Leu Ala His Asn Arg Ile
 50 55 60

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Val	Leu	Asp	Leu	His	Asn	Asn	Ser	Leu	Met	Glu	Leu	Pro	Arg	Gly	
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Leu	Phe	Leu	His	Ala	Lys	Arg	Leu	Ala	His	Leu	Asp	Leu	Ser	Tyr	
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Asn	Asn	Phe	Ser	His	Val	Pro	Ala	Asp	Met	Phe	Gln	Glu	Ala	His	
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Gly	Leu	Val	His	Ile	Asp	Leu	Ser	His	Asn	Pro	Trp	Leu	Arg	Arg	
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Val	His	Pro	Gln	Ala	Phe	Gln	Gly	Leu	Met	Gln	Leu	Arg	Asp	Leu	
				140					145					150	
Asp	Leu	Ser	Tyr	Gly	Gly	Leu	Ala	Phe	Leu	Ser	Leu	Glu	Ala	Leu	
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Glu	Gly	Leu	Pro	Gly	Leu	Val	Thr	Leu	Gln	Ile	Gly	Gly	Asn	Pro	
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Trp	Val	Cys	Gly	Cys	Thr	Met	Glu	Pro	Leu	Leu	Lys	Trp	Leu	Arg	
				185					190					195	
Asn	Arg	Ile	Gln	Arg	Cys	Thr	Ala	Asp	Ser	Gln	Leu	Ala	Glu	Cys	
				200					205					210	
Arg	Gly	Pro	Pro	Glu	Val	Glu	Gly	Ala	Pro	Leu	Phe	Ser	Leu	Thr	
				215					220					225	
Glu	Glu	Ser	Phe	Lys	Ala	Cys	His	Leu	Thr	Leu	Thr	Leu	Asp	Asp	
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Tyr	Leu	Phe	Ile	Ala	Phe	Val	Gly	Phe	Val	Val	Ser	Ile	Ala	Ser	
				245					250					255	
Val	Ala	Thr	Asn	Phe	Leu	Leu	Gly	Ile	Thr	Ala	Asn	Cys	Cys	His	
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<211> 2737

<212> DNA

<213> Homo Sapien

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<211> 525

<212> PRT

<213> Homo Sapien

<400> 56

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Thr	Arg	Gly	Gln	Lys	Pro	Asn	Phe	Val	Ile	Ile	Leu	Ala	Asp	Asp
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Thr	Ala	Asn	Leu	Asp	Lys	Met	Ala	Ser	Glu	Gly	Met	Arg	Phe	Val	
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Asp	Phe	His	Ala	Ala	Ala	Ser	Thr	Cys	Ser	Pro	Ser	Arg	Ala	Ser	
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Leu	Leu	Thr	Gly	Arg	Leu	Gly	Leu	Arg	Asn	Gly	Val	Thr	Arg	Asn	
				95					100					105	
Phe	Ala	Val	Thr	Ser	Val	Gly	Gly	Leu	Pro	Leu	Asn	Glu	Thr	Thr	
				110					115					120	
Leu	Ala	Glu	Val	Leu	Gln	Gln	Ala	Gly	Tyr	Val	Thr	Gly	Ile	Ile	
				125					130					135	
Gly	Lys	Trp	His	Leu	Gly	His	His	Gly	Ser	Tyr	His	Pro	Asn	Phe	
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Arg	Gly	Phe	Asp	Tyr	Tyr	Phe	Gly	Ile	Pro	Tyr	Ser	His	Asp	Met	
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Gly	Cys	Thr	Asp	Thr	Pro	Gly	Tyr	Asn	His	Pro	Pro	Cys	Pro	Ala	
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Cys	Pro	Gln	Gly	Asp	Gly	Pro	Ser	Arg	Asn	Leu	Gln	Arg	Asp	Cys	
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Tyr	Thr	Asp	Val	Ala	Leu	Pro	Leu	Tyr	Glu	Asn	Leu	Asn	Ile	Val	
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Lys	Ala	Thr	Gln	Phe	Ile	Gln	Arg	Ala	Ser	Thr	Ser	Gly	Arg	Pro	
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Phe	Leu	Leu	Tyr	Val	Ala	Leu	Ala	His	Met	His	Val	Pro	Leu	Pro	
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Val	Gly	Pro	Phe	Thr	Gly	Phe	Trp	Gln	Thr	Arg	Gln	Gly	Gly	Ser	
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Pro	Ala	Lys	Gln	Thr	Thr	Trp	Glu	Gly	Gly	His	Arg	Val	Pro	Ala	

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Leu Ala Tyr Trp	Pro Gly Arg Val	Pro Val Asn Val Thr Ser Thr			
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Ala Leu Leu Ser	Val Leu Asp Ile Phe	Pro Thr Val Val Ala Leu			
	365	370			375
Ala Gln Ala Ser	Leu Pro Gln Gly Arg	Arg Phe Asp Gly Val Asp			
	380	385			390
Val Ser Glu Val	Leu Phe Gly Arg Ser	Gln Pro Gly His Arg Val			
	395	400			405
Leu Phe His Pro	Asn Ser Gly Ala Ala	Gly Glu Phe Gly Ala Leu			
	410	415			420
Gln Thr Val Arg	Leu Glu Arg Tyr Lys	Ala Phe Tyr Ile Thr Gly			
	425	430			435
Gly Ala Arg Ala	Cys Asp Gly Ser Met	Val Pro Glu Leu Gln His			
	440	445			450
Lys Phe Pro Leu	Ile Phe Asn Leu Glu	Asp Asp Thr Ala Glu Ala			
	455	460			465
Val Pro Leu Glu	Arg Gly Gly Ala Glu	Tyr Gln Ala Val Leu Pro			
	470	475			480
Glu Val Arg Lys	Val Leu Ala Asp Val	Leu Gln Asp Ile Ala Asn			
	485	490			495
Asp Asn Ile Ser	Ser Ala Asp Tyr Thr	Gln Asp Pro Ser Val Thr			
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Pro Cys Cys Asn	Pro Tyr Gln Ile Ala	Cys Arg Cys Gln Ala Ala			
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 <211> 2443
 <212> DNA
 <213> Homo Sapien

<400> 57
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<210> 58
 <211> 486
 <212> PRT
 <213> Homo Sapien

<400> 58
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 35 40 45
 His Val Gly Ala Val Ala Ala Val Thr Met Leu Ser Trp Ile Val
 50 55 60
 Ala Gly Gln Phe Ala Arg Ala Glu Arg Thr Ser Ser Gln Val Thr
 65 70 75
 Ile Leu Cys Thr Phe Phe Thr Val Val Phe Ala Leu Tyr Leu Ala
 80 85 90
 Pro Leu Thr Ile Ser Ser Pro Cys Ile Met Glu Lys Lys Asp Leu
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 Gly Pro Lys Pro Ala Leu Ile Gly His Arg Gly Ala Pro Met Leu
 110 115 120
 Ala Pro Glu His Thr Leu Met Ser Phe Arg Lys Ala Leu Glu Gln
 125 130 135

	425		430		435
Phe Ser Glu Ile Ser Asp Gly Val Glu Val Ser Asp Val Leu Ser					
	440		445		450
Val Cys Ser Asp Asn Ser Tyr Asp Thr Tyr Ala Asn Ser Thr Ala					
	455		460		465
Thr Pro Val Gly Pro Arg Gly Gly Gly Ser His Thr Lys Thr Leu					
	470		475		480
Ile Glu Arg Ser Gly Arg					
	485				

<210> 59
 <211> 2550
 <212> DNA
 <213> Homo Sapien

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 ggtaagcact agtccatgag cctgcttgga atcacactgg atgtctccgt 2500
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<210> 60
 <211> 724
 <212> PRT
 <213> Homo Sapien

<400> 60
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 20 25 30
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 35 40 45
 Leu Asp Tyr Gly Pro Pro Phe Gln Pro Pro Leu His Leu Glu Phe
 50 55 60
 Cys Ser Asp Tyr Glu Ser Phe Gly Cys Cys Asp Gln His Lys Asp
 65 70 75
 Arg Arg Ile Ala Ala Arg Tyr Trp Asp Ile Met Glu Tyr Phe Asp
 80 85 90
 Leu Lys Arg His Glu Leu Cys Gly Asp Tyr Ile Lys Asp Ile Leu
 95 100 105
 Cys Gln Glu Cys Ser Pro Tyr Ala Ala His Leu Tyr Asp Ala Glu
 110 115 120
 Asn Thr Gln Thr Pro Leu Arg Asn Leu Pro Gly Leu Cys Ser Asp
 125 130 135
 Tyr Cys Ser Ala Phe His Ser Asn Cys His Ser Ala Ile Ser Leu
 140 145 150
 Leu Thr Asn Asp Arg Gly Leu Gln Glu Ser His Gly Arg Asp Gly
 155 160 165
 Thr Arg Phe Cys His Leu Leu Asp Leu Pro Asp Lys Asp Tyr Cys
 170 175 180
 Phe Pro Asn Val Leu Arg Asn Asp Tyr Leu Asn Arg His Leu Gly
 185 190 195
 Met Val Ala Gln Asp Pro Gln Gly Cys Leu Gln Leu Cys Leu Ser
 200 205 210
 Glu Val Ala Asn Gly Leu Arg Asn Pro Val Ser Met Val His Ala
 215 220 225
 Gly Asp Gly Thr His Arg Phe Phe Val Ala Glu Gln Val Gly Val

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				245					250					255	
Leu	Asp	Leu	Lys	Asn	Ile	Val	Leu	Thr	Thr	Pro	Trp	Ile	Gly	Asp	
				260					265					270	
Glu	Arg	Gly	Phe	Leu	Gly	Leu	Ala	Phe	His	Pro	Lys	Phe	Arg	His	
				275					280					285	
Asn	Arg	Lys	Phe	Tyr	Ile	Tyr	Tyr	Ser	Cys	Leu	Asp	Lys	Lys	Lys	
				290					295					300	
Val	Glu	Lys	Ile	Arg	Ile	Ser	Glu	Met	Lys	Val	Ser	Arg	Ala	Asp	
				305					310					315	
Pro	Asn	Lys	Ala	Asp	Leu	Lys	Ser	Glu	Arg	Val	Ile	Leu	Glu	Ile	
				320					325					330	
Glu	Glu	Pro	Ala	Ser	Asn	His	Asn	Gly	Gly	Gln	Leu	Leu	Phe	Gly	
				335					340					345	
Leu	Asp	Gly	Tyr	Met	Tyr	Ile	Phe	Thr	Gly	Asp	Gly	Gly	Gln	Ala	
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Gly	Asp	Pro	Phe	Gly	Leu	Phe	Gly	Asn	Ala	Gln	Asn	Lys	Ser	Ser	
				365					370					375	
Leu	Leu	Gly	Lys	Val	Leu	Arg	Ile	Asp	Val	Asn	Arg	Ala	Gly	Ser	
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His	Gly	Lys	Arg	Tyr	Arg	Val	Pro	Ser	Asp	Asn	Pro	Phe	Val	Ser	
				395					400					405	
Glu	Pro	Gly	Ala	His	Pro	Ala	Ile	Tyr	Ala	Tyr	Gly	Ile	Arg	Asn	
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Met	Trp	Arg	Cys	Ala	Val	Asp	Arg	Gly	Asp	Pro	Ile	Thr	Arg	Gln	
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Gly	Arg	Gly	Arg	Ile	Phe	Cys	Gly	Asp	Val	Gly	Gln	Asn	Arg	Phe	
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Glu	Glu	Val	Asp	Leu	Ile	Leu	Lys	Gly	Gly	Asn	Tyr	Gly	Trp	Arg	
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Ala	Lys	Glu	Gly	Phe	Ala	Cys	Tyr	Asp	Lys	Lys	Leu	Cys	His	Asn	
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Ala	Ser	Leu	Asp	Asp	Val	Leu	Pro	Ile	Tyr	Ala	Tyr	Gly	His	Ala	
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Val	Gly	Lys	Ser	Val	Thr	Gly	Gly	Tyr	Val	Tyr	Arg	Gly	Cys	Glu	
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Ser	Pro	Asn	Leu	Asn	Gly	Leu	Tyr	Ile	Phe	Gly	Asp	Phe	Met	Ser	
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Gly	Arg	Leu	Met	Ala	Leu	Gln	Glu	Asp	Arg	Lys	Asn	Lys	Lys	Trp	530	535	540
Lys	Lys	Gln	Asp	Leu	Cys	Leu	Gly	Ser	Thr	Thr	Ser	Cys	Ala	Phe	545	550	555
Pro	Gly	Leu	Ile	Ser	Thr	His	Ser	Lys	Phe	Ile	Ile	Ser	Phe	Ala	560	565	570
Glu	Asp	Glu	Ala	Gly	Glu	Leu	Tyr	Phe	Leu	Ala	Thr	Ser	Tyr	Pro	575	580	585
Ser	Ala	Tyr	Ala	Pro	Arg	Gly	Ser	Ile	Tyr	Lys	Phe	Val	Asp	Pro	590	595	600
Ser	Arg	Arg	Ala	Pro	Pro	Gly	Lys	Cys	Lys	Tyr	Lys	Pro	Val	Pro	605	610	615
Val	Arg	Thr	Lys	Ser	Lys	Arg	Ile	Pro	Phe	Arg	Pro	Leu	Ala	Lys	620	625	630
Thr	Val	Leu	Asp	Leu	Leu	Lys	Glu	Gln	Ser	Glu	Lys	Ala	Ala	Arg	635	640	645
Lys	Ser	Ser	Ser	Ala	Thr	Leu	Ala	Ser	Gly	Pro	Ala	Gln	Gly	Leu	650	655	660
Ser	Glu	Lys	Gly	Ser	Ser	Lys	Lys	Leu	Ala	Ser	Pro	Thr	Ser	Ser	665	670	675
Lys	Asn	Thr	Leu	Arg	Gly	Pro	Gly	Thr	Lys	Lys	Lys	Ala	Arg	Val	680	685	690
Gly	Pro	His	Val	Arg	Gln	Gly	Lys	Arg	Arg	Lys	Ser	Leu	Lys	Ser	695	700	705
His	Ser	Gly	Arg	Met	Arg	Pro	Ser	Ala	Glu	Gln	Lys	Arg	Ala	Gly	710	715	720

Arg Ser Leu Pro

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 <211> 2119
 <212> DNA
 <213> Homo Sapien

<400> 61
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 gaaaatgctg catcagctac tccttctctgc cgaagcctga cctaccacag 250

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caccaactca gagaaatata atttccacag ttccaattcc tcctacattg 400
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<210> 62
<211> 95
<212> PRT
<213> Homo Sapien

<400> 62
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Thr Pro Gly Tyr Cys Arg Thr Cys Cys His Trp Gly Glu Thr Ala
35 40 45
Leu Phe Met Cys Asn Ala Ser Arg Lys Cys Cys Ile Ser Tyr Ser
50 55 60
Phe Leu Pro Lys Pro Asp Leu Pro Gln Leu Ile Gly Asn His Trp
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Gln Ser Arg Arg Arg Asn Thr Gln Arg Lys Asp Lys Lys Gln Gln
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Thr Thr Val Thr Ser
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<210> 63
<211> 2623
<212> DNA
<213> Homo Sapien

<400> 63
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 <211> 504
 <212> PRT
 <213> Homo Sapien

<400> 64
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 His Leu Pro Pro Gly Pro Thr Pro Leu Pro Leu Leu Gly Asn Leu
 35 40 45
 Leu Gln Leu Arg Pro Gly Ala Leu Tyr Ser Gly Leu Met Arg Leu
 50 55 60

Ser	Lys	Lys	Tyr	Gly	Pro	Val	Phe	Thr	Ile	Tyr	Leu	Gly	Pro	Trp	
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Arg	Pro	Val	Val	Val	Leu	Val	Gly	Gln	Glu	Ala	Val	Arg	Glu	Ala	
				80					85					90	
Leu	Gly	Gly	Gln	Ala	Glu	Glu	Phe	Ser	Gly	Arg	Gly	Thr	Val	Ala	
				95					100					105	
Met	Leu	Glu	Gly	Thr	Phe	Asp	Gly	His	Gly	Val	Phe	Phe	Ser	Asn	
				110					115					120	
Gly	Glu	Arg	Trp	Arg	Gln	Leu	Arg	Lys	Phe	Thr	Met	Leu	Ala	Leu	
				125					130					135	
Arg	Asp	Leu	Gly	Met	Gly	Lys	Arg	Glu	Gly	Glu	Glu	Leu	Ile	Gln	
				140					145					150	
Ala	Glu	Ala	Arg	Cys	Leu	Val	Glu	Thr	Phe	Gln	Gly	Thr	Glu	Gly	
				155					160					165	
Arg	Pro	Phe	Asp	Pro	Ser	Leu	Leu	Leu	Ala	Gln	Ala	Thr	Ser	Asn	
				170					175					180	
Val	Val	Cys	Ser	Leu	Leu	Phe	Gly	Leu	Arg	Phe	Ser	Tyr	Glu	Asp	
				185					190					195	
Lys	Glu	Phe	Gln	Ala	Val	Val	Arg	Ala	Ala	Gly	Gly	Thr	Leu	Leu	
				200					205					210	
Gly	Val	Ser	Ser	Gln	Gly	Gly	Gln	Thr	Tyr	Glu	Met	Phe	Ser	Trp	
				215					220					225	
Phe	Leu	Arg	Pro	Leu	Pro	Gly	Pro	His	Lys	Gln	Leu	Leu	His	His	
				230					235					240	
Val	Ser	Thr	Leu	Ala	Ala	Phe	Thr	Val	Arg	Gln	Val	Gln	Gln	His	
				245					250					255	
Gln	Gly	Asn	Leu	Asp	Ala	Ser	Gly	Pro	Ala	Arg	Asp	Leu	Val	Asp	
				260					265					270	
Ala	Phe	Leu	Leu	Lys	Met	Ala	Gln	Glu	Glu	Gln	Asn	Pro	Gly	Thr	
				275					280					285	
Glu	Phe	Thr	Asn	Lys	Asn	Met	Leu	Met	Thr	Val	Ile	Tyr	Leu	Leu	
				290					295					300	
Phe	Ala	Gly	Thr	Met	Thr	Val	Ser	Thr	Thr	Val	Gly	Tyr	Thr	Leu	
				305					310					315	
Leu	Leu	Leu	Met	Lys	Tyr	Pro	His	Val	Gln	Lys	Trp	Val	Arg	Glu	
				320					325					330	
Glu	Leu	Asn	Arg	Glu	Leu	Gly	Ala	Gly	Gln	Ala	Pro	Ser	Leu	Gly	
				335					340					345	
Asp	Arg	Thr	Arg	Leu	Pro	Tyr	Thr	Asp	Ala	Val	Leu	His	Glu	Ala	

	350		355		360
Gln Arg Leu Leu Ala Leu Val Pro Met Gly Ile Pro Arg Thr Leu					
	365		370		375
Met Arg Thr Thr Arg Phe Arg Gly Tyr Thr Leu Pro Gln Gly Thr					
	380		385		390
Glu Val Phe Pro Leu Leu Gly Ser Ile Leu His Asp Pro Asn Ile					
	395		400		405
Phe Lys His Pro Glu Glu Phe Asn Pro Asp Arg Phe Leu Asp Ala					
	410		415		420
Asp Gly Arg Phe Arg Lys His Glu Ala Phe Leu Pro Phe Ser Leu					
	425		430		435
Gly Lys Arg Val Cys Leu Gly Glu Gly Leu Ala Lys Ala Glu Leu					
	440		445		450
Phe Leu Phe Phe Thr Thr Ile Leu Gln Ala Phe Ser Leu Glu Ser					
	455		460		465
Pro Cys Pro Pro Asp Thr Leu Ser Leu Lys Pro Thr Val Ser Gly					
	470		475		480
Leu Phe Asn Ile Pro Pro Ala Phe Gln Leu Gln Val Arg Pro Thr					
	485		490		495
Asp Leu His Ser Thr Thr Gln Thr Arg					
	500				

<210> 65
 <211> 1606
 <212> DNA
 <213> Homo Sapien

<400> 65
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 agccccattt ggcttgctgg gggagaagac ccgccaggtg tctctggagg 150
 tcatccctaa ctggctgggc cccctgcaga acctgcttca tatacgggca 200
 gtgggcacca attccacact gcactatgtg tggagcagcc tggggcctct 250
 ggcagtggta atggtggcca ccaacacccc ccacagcacc ctgagcatca 300
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 cctaaggaca gcattcagtt ttcttctgcc cttgttttta ccaggctgct 400
 tgagtttgac agcaccaacg tgtccgatac ggcagcaaag cctttgggaa 450
 gaccatatcc tccatactcc ttggccgatt tctcttgga caacatcact 500

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gaacgaccct accaggactt ttgccaatgg cagcctggcc ttcaggggtcc 600
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ctttgcacag tggcgaccag tggcttactc ccagaagccg gggggccgag 900
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gctattgata aggtccctt ggtgttgctt tcttgcatct ccacacattt 1500
cccttgatg ggacttgcag gcctaaatga gaggcattct gactgggttg 1550
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aaaaaa 1606

<210> 66
<211> 406
<212> PRT
<213> Homo Sapien

<400> 66
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Pro Ser Pro Leu Leu Leu Trp Thr Leu Leu Leu Phe Ala Ala Pro
20 25 30

Phe	Gly	Leu	Leu	Gly	Glu	Lys	Thr	Arg	Gln	Val	Ser	Leu	Glu	Val	
				35					40					45	
Ile	Pro	Asn	Trp	Leu	Gly	Pro	Leu	Gln	Asn	Leu	Leu	His	Ile	Arg	
				50					55					60	
Ala	Val	Gly	Thr	Asn	Ser	Thr	Leu	His	Tyr	Val	Trp	Ser	Ser	Leu	
				65					70					75	
Gly	Pro	Leu	Ala	Val	Val	Met	Val	Ala	Thr	Asn	Thr	Pro	His	Ser	
				80					85					90	
Thr	Leu	Ser	Ile	Asn	Trp	Ser	Leu	Leu	Leu	Ser	Pro	Glu	Pro	Asp	
				95					100					105	
Gly	Gly	Leu	Met	Val	Leu	Pro	Lys	Asp	Ser	Ile	Gln	Phe	Ser	Ser	
				110					115					120	
Ala	Leu	Val	Phe	Thr	Arg	Leu	Leu	Glu	Phe	Asp	Ser	Thr	Asn	Val	
				125					130					135	
Ser	Asp	Thr	Ala	Ala	Lys	Pro	Leu	Gly	Arg	Pro	Tyr	Pro	Pro	Tyr	
				140					145					150	
Ser	Leu	Ala	Asp	Phe	Ser	Trp	Asn	Asn	Ile	Thr	Asp	Ser	Leu	Asp	
				155					160					165	
Pro	Ala	Thr	Leu	Ser	Ala	Thr	Phe	Gln	Gly	His	Pro	Met	Asn	Asp	
				170					175					180	
Pro	Thr	Arg	Thr	Phe	Ala	Asn	Gly	Ser	Leu	Ala	Phe	Arg	Val	Gln	
				185					190					195	
Ala	Phe	Ser	Arg	Ser	Ser	Arg	Pro	Ala	Gln	Pro	Pro	Arg	Leu	Leu	
				200					205					210	
His	Thr	Ala	Asp	Thr	Cys	Gln	Leu	Glu	Val	Ala	Leu	Ile	Gly	Ala	
				215					220					225	
Ser	Pro	Arg	Gly	Asn	Arg	Ser	Leu	Phe	Gly	Leu	Glu	Val	Ala	Thr	
				230					235					240	
Leu	Gly	Gln	Gly	Pro	Asp	Cys	Pro	Ser	Met	Gln	Glu	Gln	His	Ser	
				245					250					255	
Ile	Asp	Asp	Glu	Tyr	Ala	Pro	Ala	Val	Phe	Gln	Leu	Asp	Gln	Leu	
				260					265					270	
Leu	Trp	Gly	Ser	Leu	Pro	Ser	Gly	Phe	Ala	Gln	Trp	Arg	Pro	Val	
				275					280					285	
Ala	Tyr	Ser	Gln	Lys	Pro	Gly	Gly	Arg	Glu	Ser	Ala	Leu	Pro	Cys	
				290					295					300	
Gln	Ala	Ser	Pro	Leu	His	Pro	Ala	Leu	Ala	Tyr	Ser	Leu	Pro	Gln	
				305					310					315	
Ser	Pro	Ile	Val	Arg	Ala	Phe	Phe	Gly	Ser	Gln	Asn	Asn	Phe	Cys	

	320		325		330
Ala Phe Asn Leu Thr Phe Gly Ala Ser Thr Gly Pro Gly Tyr Trp					
	335		340		345
Asp Gln His Tyr Leu Ser Trp Ser Met Leu Leu Gly Val Gly Phe					
	350		355		360
Pro Pro Val Asp Gly Leu Ser Pro Leu Val Leu Gly Ile Met Ala					
	365		370		375
Val Ala Leu Gly Ala Pro Gly Leu Met Leu Leu Gly Gly Gly Leu					
	380		385		390
Val Leu Leu Leu His His Lys Lys Tyr Ser Glu Tyr Gln Ser Ile					
	395		400		405

Asn

<210> 67
 <211> 4185
 <212> DNA
 <213> Homo Sapien

<400> 67
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 ggccctgtgg ttggtctggg cgcttctagg agtggccgga tcatgcccgg 200
 agccgtgcmc ctgcgtggac aagtacgctc accagttcmc ggactgcmc 250
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<210> 68
<211> 745
<212> PRT
<213> Homo Sapien

<400> 68
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Ala His Gln Phe Ala Asp Cys Ala Tyr Lys Glu Leu Arg Glu Val
35 40 45
Pro Glu Gly Leu Pro Ala Asn Val Thr Thr Leu Ser Leu Ser Ala
50 55 60
Asn Lys Ile Thr Val Leu Arg Arg Gly Ala Phe Ala Asp Val Thr
65 70 75
Gln Val Thr Ser Leu Trp Leu Ala His Asn Glu Val Arg Thr Val
80 85 90
Glu Pro Gly Ala Leu Ala Val Leu Ser Gln Leu Lys Asn Leu Asp
95 100 105
Leu Ser His Asn Phe Ile Ser Ser Phe Pro Trp Ser Asp Leu Arg
110 115 120
Asn Leu Ser Ala Leu Gln Leu Leu Lys Met Asn His Asn Arg Leu
125 130 135
Gly Ser Leu Pro Arg Asp Ala Leu Gly Ala Leu Pro Asp Leu Arg
140 145 150
Ser Leu Arg Ile Asn Asn Asn Arg Leu Arg Thr Leu Ala Pro Gly
155 160 165

Thr	Phe	Asp	Ala	Leu	Ser	Ala	Leu	Ser	His	Leu	Gln	Leu	Tyr	His	
				170					175					180	
Asn	Pro	Phe	His	Cys	Gly	Cys	Gly	Leu	Val	Trp	Leu	Gln	Ala	Trp	
				185					190					195	
Ala	Ala	Ser	Thr	Arg	Val	Ser	Leu	Pro	Glu	Pro	Asp	Ser	Ile	Ala	
				200					205					210	
Cys	Ala	Ser	Pro	Pro	Ala	Leu	Gln	Gly	Val	Pro	Val	Tyr	Arg	Leu	
				215					220					225	
Pro	Ala	Leu	Pro	Cys	Ala	Pro	Pro	Ser	Val	His	Leu	Ser	Ala	Glu	
				230					235					240	
Pro	Pro	Leu	Glu	Ala	Pro	Gly	Thr	Pro	Leu	Arg	Ala	Gly	Leu	Ala	
				245					250					255	
Phe	Val	Leu	His	Cys	Ile	Ala	Asp	Gly	His	Pro	Thr	Pro	Arg	Leu	
				260					265					270	
Gln	Trp	Gln	Leu	Gln	Ile	Pro	Gly	Gly	Thr	Val	Val	Leu	Glu	Pro	
				275					280					285	
Pro	Val	Leu	Ser	Gly	Glu	Asp	Asp	Gly	Val	Gly	Ala	Glu	Glu	Gly	
				290					295					300	
Glu	Gly	Glu	Gly	Asp	Gly	Asp	Leu	Leu	Thr	Gln	Thr	Gln	Ala	Gln	
				305					310					315	
Thr	Pro	Thr	Pro	Ala	Pro	Ala	Trp	Pro	Ala	Pro	Pro	Ala	Thr	Pro	
				320					325					330	
Arg	Phe	Leu	Ala	Leu	Ala	Asn	Gly	Ser	Leu	Leu	Val	Pro	Leu	Leu	
				335					340					345	
Ser	Ala	Lys	Glu	Ala	Gly	Val	Tyr	Thr	Cys	Arg	Ala	His	Asn	Glu	
				350					355					360	
Leu	Gly	Ala	Asn	Ser	Thr	Ser	Ile	Arg	Val	Ala	Val	Ala	Ala	Thr	
				365					370					375	
Gly	Pro	Pro	Lys	His	Ala	Pro	Gly	Ala	Gly	Gly	Glu	Pro	Asp	Gly	
				380					385					390	
Gln	Ala	Pro	Thr	Ser	Glu	Arg	Lys	Ser	Thr	Ala	Lys	Gly	Arg	Gly	
				395					400					405	
Asn	Ser	Val	Leu	Pro	Ser	Lys	Pro	Glu	Gly	Lys	Ile	Lys	Gly	Gln	
				410					415					420	
Gly	Leu	Ala	Lys	Val	Ser	Ile	Leu	Gly	Glu	Thr	Glu	Thr	Glu	Pro	
				425					430					435	
Glu	Glu	Asp	Thr	Ser	Glu	Gly	Glu	Glu	Ala	Glu	Asp	Gln	Ile	Leu	
				440					445					450	
Ala	Asp	Pro	Ala	Glu	Glu	Gln	Arg	Cys	Gly	Asn	Gly	Asp	Pro	Ser	

				455					460					465
Arg	Tyr	Val	Ser	Asn	His	Ala	Phe	Asn	Gln	Ser	Ala	Glu	Leu	Lys
				470					475					480
Pro	His	Val	Phe	Glu	Leu	Gly	Val	Ile	Ala	Leu	Asp	Val	Ala	Glu
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Arg	Glu	Ala	Arg	Val	Gln	Leu	Thr	Pro	Leu	Ala	Ala	Arg	Trp	Gly
				500					505					510
Pro	Gly	Pro	Gly	Gly	Ala	Gly	Gly	Ala	Pro	Arg	Pro	Gly	Arg	Arg
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Pro	Leu	Arg	Leu	Leu	Tyr	Leu	Cys	Pro	Ala	Gly	Gly	Gly	Ala	Ala
				530					535					540
Val	Gln	Trp	Ser	Arg	Val	Glu	Glu	Gly	Val	Asn	Ala	Tyr	Trp	Phe
				545					550					555
Arg	Gly	Leu	Arg	Pro	Gly	Thr	Asn	Tyr	Ser	Val	Cys	Leu	Ala	Leu
				560					565					570
Ala	Gly	Glu	Ala	Cys	His	Val	Gln	Val	Val	Phe	Ser	Thr	Lys	Lys
				575					580					585
Glu	Leu	Pro	Ser	Leu	Leu	Val	Ile	Val	Ala	Val	Ser	Val	Phe	Leu
				590					595					600
Leu	Val	Leu	Ala	Thr	Val	Pro	Leu	Leu	Gly	Ala	Ala	Cys	Cys	His
				605					610					615
Leu	Leu	Ala	Lys	His	Pro	Gly	Lys	Pro	Tyr	Arg	Leu	Ile	Leu	Arg
				620					625					630
Pro	Gln	Ala	Pro	Asp	Pro	Met	Glu	Lys	Arg	Ile	Ala	Ala	Asp	Phe
				635					640					645
Asp	Pro	Arg	Ala	Ser	Tyr	Leu	Glu	Ser	Glu	Lys	Ser	Tyr	Pro	Ala
				650					655					660
Gly	Gly	Glu	Ala	Gly	Gly	Glu	Glu	Pro	Glu	Asp	Val	Gln	Gly	Glu
				665					670					675
Gly	Leu	Asp	Glu	Asp	Ala	Glu	Gln	Gly	Asp	Pro	Ser	Gly	Asp	Leu
				680					685					690
Gln	Arg	Glu	Glu	Ser	Leu	Ala	Ala	Cys	Ser	Leu	Val	Glu	Ser	Gln
				695					700					705
Ser	Lys	Ala	Asn	Gln	Glu	Glu	Phe	Glu	Ala	Gly	Ser	Glu	Tyr	Ser
				710					715					720
Asp	Arg	Leu	Pro	Leu	Gly	Ala	Glu	Ala	Val	Asn	Ile	Ala	Gln	Glu
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Ile	Asn	Gly	Asn	Tyr	Arg	Gln	Thr	Ala	Gly					
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<211> 2916
<212> DNA
<213> Homo Sapien

<400> 69
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cggagaggta gccatgatgc cccacttggt gaatggagat gcagctcagc 250
atgttattct cgttcaagtt aatccagggt agactttcac aataagagca 300
gaggatggaa cacttcagtg cattcaagga cctgctgaag ttcccatgat 350
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ccatcatctc cctccctatc tgactcacca tccacatttt attcataact 550
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tctcaaaaaa aaaaaa 2916

<210> 70
<211> 625
<212> PRT
<213> Homo Sapien

<400> 70
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20 25 30
Ala Gln His Val Ile Leu Val Gln Val Asn Pro Gly Glu Thr Phe
35 40 45
Thr Ile Arg Ala Glu Asp Gly Thr Leu Gln Cys Ile Gln Gly Pro
50 55 60
Ala Glu Val Pro Met Met Ser Pro Asn Gly Ser Ile Pro Pro Ile
65 70 75
His Val Pro Pro Gly Tyr Ile Ser Gln Val Ile Glu Asp Ser Thr
80 85 90
Gly Val Arg Arg Val Val Val Thr Pro Gln Ser Pro Glu Cys Tyr
95 100 105
Pro Pro Ser Tyr Pro Ser Ala Met Ser Pro Thr His His Leu Pro
110 115 120
Pro Tyr Leu Thr His His Pro His Phe Ile His Asn Ser His Thr
125 130 135
Ala Tyr Tyr Pro Pro Val Thr Gly Pro Gly Asp Met Pro Pro Gln
140 145 150
Phe Phe Pro Gln His His Leu Pro His Thr Ile Tyr Gly Glu Gln
155 160 165
Glu Ile Ile Pro Phe Tyr Gly Met Ser Ser Tyr Ile Thr Arg Glu
170 175 180
Asp Gln Tyr Ser Lys Pro Pro His Lys Lys Leu Lys Asp Arg Gln
185 190 195
Ile Asp Arg Gln Asn Arg Leu Asn Ser Pro Pro Ser Ser Ile Tyr
200 205 210
Lys Ser Ser Cys Thr Thr Val Tyr Asn Gly Tyr Gly Lys Gly His
215 220 225

Ser	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Ser	Gly	Pro	Gly	Ile	
				230					235					240	
Lys	Lys	Thr	Glu	Arg	Arg	Ala	Arg	Ser	Ser	Pro	Lys	Ser	Asn	Asp	
				245					250					255	
Ser	Asp	Leu	Gln	Glu	Tyr	Glu	Leu	Glu	Val	Lys	Arg	Val	Gln	Asp	
				260					265					270	
Ile	Leu	Ser	Gly	Ile	Glu	Lys	Pro	Gln	Val	Ser	Asn	Ile	Gln	Ala	
				275					280					285	
Arg	Ala	Val	Val	Leu	Ser	Trp	Ala	Pro	Pro	Val	Gly	Leu	Ser	Cys	
				290					295					300	
Gly	Pro	His	Ser	Gly	Leu	Ser	Phe	Pro	Tyr	Ser	Tyr	Glu	Val	Ala	
				305					310					315	
Leu	Ser	Asp	Lys	Gly	Arg	Asp	Gly	Lys	Tyr	Lys	Ile	Ile	Tyr	Ser	
				320					325					330	
Gly	Glu	Glu	Leu	Glu	Cys	Asn	Leu	Lys	Asp	Leu	Arg	Pro	Ala	Thr	
				335					340					345	
Asp	Tyr	His	Val	Arg	Val	Tyr	Ala	Met	Tyr	Asn	Ser	Val	Lys	Gly	
				350					355					360	
Ser	Cys	Ser	Glu	Pro	Val	Ser	Phe	Thr	Thr	His	Ser	Cys	Ala	Pro	
				365					370					375	
Glu	Cys	Pro	Phe	Pro	Pro	Lys	Leu	Ala	His	Arg	Ser	Lys	Ser	Ser	
				380					385					390	
Leu	Thr	Leu	Gln	Trp	Lys	Ala	Pro	Ile	Asp	Asn	Gly	Ser	Lys	Ile	
				395					400					405	
Thr	Asn	Tyr	Leu	Leu	Glu	Trp	Asp	Glu	Gly	Lys	Arg	Asn	Ser	Gly	
				410					415					420	
Phe	Arg	Gln	Cys	Phe	Phe	Gly	Ser	Gln	Lys	His	Cys	Lys	Leu	Thr	
				425					430					435	
Lys	Leu	Cys	Pro	Ala	Met	Gly	Tyr	Thr	Phe	Arg	Leu	Ala	Ala	Arg	
				440					445					450	
Asn	Asp	Ile	Gly	Thr	Ser	Gly	Tyr	Ser	Gln	Glu	Val	Val	Cys	Tyr	
				455					460					465	
Thr	Leu	Gly	Asn	Ile	Pro	Gln	Met	Pro	Ser	Ala	Pro	Arg	Leu	Val	
				470					475					480	
Arg	Ala	Gly	Ile	Thr	Trp	Val	Thr	Leu	Gln	Trp	Ser	Lys	Pro	Glu	
				485					490					495	
Gly	Cys	Ser	Pro	Glu	Glu	Val	Ile	Thr	Tyr	Thr	Leu	Glu	Ile	Gln	
				500					505					510	
Glu	Asp	Glu	Asn	Asp	Asn	Leu	Phe	His	Pro	Lys	Tyr	Thr	Gly	Glu	

515	520	525
Asp Leu Thr Cys Thr Val Lys Asn Leu	Lys Arg Ser Thr Gln Tyr	
530	535	540
Lys Phe Arg Leu Thr Ala Ser Asn Thr	Glu Gly Lys Ser Cys Pro	
545	550	555
Ser Glu Val Leu Val Cys Thr Thr Ser	Pro Asp Arg Pro Gly Pro	
560	565	570
Pro Thr Arg Pro Leu Val Lys Gly Pro	Val Thr Ser His Gly Phe	
575	580	585
Ser Val Lys Trp Asp Pro Pro Lys Asp	Asn Gly Gly Ser Glu Ile	
590	595	600
Leu Lys Tyr Leu Leu Glu Ile Thr Asp	Gly Asn Ser Glu Gly Glu	
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Val Phe Gly Asn Cys Phe Ile Gln Ile	Gln	
620	625	

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 <211> 3732
 <212> DNA
 <213> Homo Sapien

<400> 71
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<210> 72

<211> 555

<212> PRT

<213> Homo Sapien

<400> 72

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				20					25					30

Lys	Phe	Asn	His	Glu	Ala	Glu	Asp	Leu	Phe	Tyr	Gln	Ser	Ser	Leu
				35					40					45

Ala	Ser	Trp	Asn	Tyr	Asn	Thr	Asn	Ile	Thr	Glu	Glu	Asn	Val	Gln
				50					55					60

Asn	Met	Asn	Asn	Ala	Gly	Asp	Lys	Trp	Ser	Ala	Phe	Leu	Lys	Glu
				65					70					75

Gln	Ser	Thr	Leu	Ala	Gln	Met	Tyr	Pro	Leu	Gln	Glu	Ile	Gln	Asn
				80					85					90

Leu	Thr	Val	Lys	Leu	Gln	Leu	Gln	Ala	Leu	Gln	Gln	Asn	Gly	Ser
				95					100					105

Ser	Val	Leu	Ser	Glu	Asp	Lys	Ser	Lys	Arg	Leu	Asn	Thr	Ile	Leu
				110					115					120

Asn	Thr	Met	Ser	Thr	Ile	Tyr	Ser	Thr	Gly	Lys	Val	Cys	Asn	Pro
				125					130					135

Asp	Asn	Pro	Gln	Glu	Cys	Leu	Leu	Leu	Glu	Pro	Gly	Leu	Asn	Glu
				140					145					150

Ile	Met	Ala	Asn	Ser	Leu	Asp	Tyr	Asn	Glu	Arg	Leu	Trp	Ala	Trp
				155					160					165

Glu	Ser	Trp	Arg	Ser	Glu	Val	Gly	Lys	Gln	Leu	Arg	Pro	Leu	Tyr
				170					175					180

Glu	Glu	Tyr	Val	Val	Leu	Lys	Asn	Glu	Met	Ala	Arg	Ala	Asn	His
				185					190					195

Tyr	Glu	Asp	Tyr	Gly	Asp	Tyr	Trp	Arg	Gly	Asp	Tyr	Glu	Val	Asn
				200					205					210

Gly	Val	Asp	Gly	Tyr	Asp	Tyr	Ser	Arg	Gly	Gln	Leu	Ile	Glu	Asp
				215					220					225

Val	Glu	His	Thr	Phe	Glu	Glu	Ile	Lys	Pro	Leu	Tyr	Glu	His	Leu
				230					235					240

His	Ala	Tyr	Val	Arg	Ala	Lys	Leu	Met	Asn	Ala	Tyr	Pro	Ser	Tyr	245	250	255
Ile	Ser	Pro	Ile	Gly	Cys	Leu	Pro	Ala	His	Leu	Leu	Gly	Asp	Met	260	265	270
Trp	Gly	Arg	Phe	Trp	Thr	Asn	Leu	Tyr	Ser	Leu	Thr	Val	Pro	Phe	275	280	285
Gly	Gln	Lys	Pro	Asn	Ile	Asp	Val	Thr	Asp	Ala	Met	Val	Asp	Gln	290	295	300
Ala	Trp	Asp	Ala	Gln	Arg	Ile	Phe	Lys	Glu	Ala	Glu	Lys	Phe	Phe	305	310	315
Val	Ser	Val	Gly	Leu	Pro	Asn	Met	Thr	Gln	Gly	Phe	Trp	Glu	Asn	320	325	330
Ser	Met	Leu	Thr	Asp	Pro	Gly	Asn	Val	Gln	Lys	Ala	Val	Cys	His	335	340	345
Pro	Thr	Ala	Trp	Asp	Leu	Gly	Lys	Gly	Asp	Phe	Arg	Ile	Leu	Met	350	355	360
Cys	Thr	Lys	Val	Thr	Met	Asp	Asp	Phe	Leu	Thr	Ala	His	His	Glu	365	370	375
Met	Gly	His	Ile	Gln	Tyr	Asp	Met	Ala	Tyr	Ala	Ala	Gln	Pro	Phe	380	385	390
Leu	Leu	Arg	Asn	Gly	Ala	Asn	Glu	Gly	Phe	His	Glu	Ala	Val	Gly	395	400	405
Glu	Ile	Met	Ser	Leu	Ser	Ala	Ala	Thr	Pro	Lys	His	Leu	Lys	Ser	410	415	420
Ile	Gly	Leu	Leu	Ser	Pro	Asp	Phe	Gln	Glu	Asp	Asn	Glu	Thr	Glu	425	430	435
Ile	Asn	Phe	Leu	Leu	Lys	Gln	Ala	Leu	Thr	Ile	Val	Gly	Thr	Leu	440	445	450
Pro	Phe	Thr	Tyr	Met	Leu	Glu	Lys	Trp	Arg	Trp	Met	Val	Phe	Lys	455	460	465
Gly	Glu	Ile	Pro	Lys	Asp	Gln	Trp	Met	Lys	Lys	Trp	Trp	Glu	Met	470	475	480
Lys	Arg	Glu	Ile	Val	Gly	Val	Val	Glu	Pro	Val	Pro	His	Asp	Glu	485	490	495
Thr	Tyr	Cys	Asp	Pro	Ala	Ser	Leu	Phe	His	Val	Ser	Asp	Asp	Tyr	500	505	510
Ser	Phe	Ile	Arg	Tyr	Tyr	Thr	Arg	Thr	Leu	Tyr	Gln	Phe	Gln	Phe	515	520	525
Gln	Glu	Ala	Leu	Cys	Gln	Ala	Ala	Lys	His	Glu	Gly	Pro	Leu	His			

	530		535		540
Lys Cys Asp Ile Ser Asn Ser Thr Glu Ala Gly Gln Lys Leu Leu					
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<210> 73
 <211> 2120
 <212> DNA
 <213> Homo Sapien

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 actcagctgg tcattctctg gcttcagaac tgggtggagtc ccatgatgga 200
 catgaggaga tcattaaggt gtacttgaag gggagggtctg gagacaagat 250
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 gagtgattgg agaattgctt gggggaatga agttccttcc acaaacacag 700
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 cctacgctgc cctggcctcc tgcagacaga tagtgggggtt acctggcaag 800
 gcctgggtgag agccagtga cctaagcttt gactgggtgg ccttgtcttt 850
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 ctctagggct acagacagtc atgtgtgact tctctctgct gtgaaaactc 950
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 cccagcaaaa tcctctttgt atttatTTTtg ctaagttatt ggtggTTTTg 1100
 cttacatctc atgattgata taatacaaaa gttctatagc cttctcttgc 1150
 agtatTTTgga tttgcttgaa accgggaaaa ctgttcccat taggcttggt 1200

aatgtcagag tgacactatt atgaatcttt ctctcccttt cctctgcctg 1250
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 tctactttcc ctgaggcttt ggggtcagag tatatgttgt ttggagaaag 1350
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<210> 74
 <211> 199
 <212> PRT
 <213> Homo Sapien

<400> 74
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 Glu Asp Gln Ala Ala Ala Gly Arg Lys Thr Tyr Ala Met Val Ser
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 Ser His Ser Ala Gly His Ser Leu Ala Ser Glu Leu Val Glu Ser
 35 40 45
 His Asp Gly His Glu Glu Ile Ile Lys Val Tyr Leu Lys Gly Arg
 50 55 60
 Ser Gly Asp Lys Met Ile His Glu Lys Asn Ile Asn Gln Leu Lys
 65 70 75

Ser	Glu	Val	Gln	Tyr	Ile	Gln	Glu	Ala	Arg	Asn	Cys	Leu	Gln	Lys
				80					85					90
Leu	Arg	Glu	Asp	Ile	Ser	Ser	Lys	Leu	Asp	Arg	Asn	Leu	Gly	Asp
				95					100					105
Ser	Leu	His	Arg	Gln	Glu	Ile	Gln	Val	Val	Leu	Glu	Lys	Pro	Asn
				110					115					120
Gly	Phe	Ser	Gln	Ser	Pro	Thr	Ala	Leu	Tyr	Ser	Ser	Pro	Pro	Glu
				125					130					135
Val	Asp	Thr	Cys	Ile	Asn	Glu	Asp	Val	Glu	Ser	Leu	Arg	Lys	Thr
				140					145					150
Val	Gln	Asp	Leu	Leu	Ala	Lys	Leu	Gln	Glu	Ala	Lys	Arg	Gln	His
				155					160					165
Gln	Ser	Asp	Cys	Val	Ala	Phe	Glu	Val	Thr	Leu	Ser	Arg	Tyr	Gln
				170					175					180
Arg	Glu	Ala	Glu	Gln	Ser	Asn	Val	Ala	Leu	Gln	Arg	Glu	Glu	Asp
				185					190					195
Arg Cys Pro Glu														

<210> 75
 <211> 3192
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 1428, 1431
 <223> unknown base

<400> 75
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 gcagataagg ctcaggccct tttgtgagaa gcagaccagc ctgggggctg 200
 gcggcaggac acctgtgtct gcatgctgaa gaagatgggt gaggccgtgg 250
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 ctggacctgg ccgagtgcaa gctgggtctcc tttcccattg gcatctacaa 350
 ggtcctgcgg aatgtctctg gccagatcca cctcatcacc ctggctaaca 400
 acgagcttaa gtccctcacc agcaagttca tgaccacatt cagtcagctc 450
 cgagagctcc acctggaggg gaacttecta caccgcctcc ccagcgaggt 500

cagtgccctg cagcacctca aggccattga cctgtcccgg aaccagttcc 550
 aggacttccc tgagcagctt accgccctgc cggcgctgga gaccatcaac 600
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 gccagccttg cgcagcatca acctccgctt caaccactc aacgccgagg 700
 tgcgcgtgat cgcgccgccc ctcatcaagt ttgacatgct catgtctccg 750
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 agctgtcctg gtttcccagg acatggaact ttcaatgcta aaactgggac 1850
 attaccagc aagtggggat ggttggtccc ctaccaggag agggcctggg 1900
 gctcttgctt cccgagaacg cctgtggctt gaagaacctt gactgcttgg 1950

Val	Asn	Glu	Thr	Val	Glu	Ser	Gly	Ser	Asp	Thr	Leu	Asp	Leu	Ala	
				20					25					30	
Glu	Cys	Lys	Leu	Val	Ser	Phe	Pro	Ile	Gly	Ile	Tyr	Lys	Val	Leu	
				35					40					45	
Arg	Asn	Val	Ser	Gly	Gln	Ile	His	Leu	Ile	Thr	Leu	Ala	Asn	Asn	
				50					55					60	
Glu	Leu	Lys	Ser	Leu	Thr	Ser	Lys	Phe	Met	Thr	Thr	Phe	Ser	Gln	
				65					70					75	
Leu	Arg	Glu	Leu	His	Leu	Glu	Gly	Asn	Phe	Leu	His	Arg	Leu	Pro	
				80					85					90	
Ser	Glu	Val	Ser	Ala	Leu	Gln	His	Leu	Lys	Ala	Ile	Asp	Leu	Ser	
				95					100					105	
Arg	Asn	Gln	Phe	Gln	Asp	Phe	Pro	Glu	Gln	Leu	Thr	Ala	Leu	Pro	
				110					115					120	
Ala	Leu	Glu	Thr	Ile	Asn	Leu	Glu	Glu	Asn	Glu	Ile	Val	Asp	Val	
				125					130					135	
Pro	Val	Glu	Lys	Leu	Ala	Ala	Met	Pro	Ala	Leu	Arg	Ser	Ile	Asn	
				140					145					150	
Leu	Arg	Phe	Asn	Pro	Leu	Asn	Ala	Glu	Val	Arg	Val	Ile	Ala	Pro	
				155					160					165	
Pro	Leu	Ile	Lys	Phe	Asp	Met	Leu	Met	Ser	Pro	Glu	Gly	Ala	Arg	
				170					175					180	
Ala	Pro	Leu	Pro												

<210> 77
 <211> 3567
 <212> DNA
 <213> Homo Sapien

<400> 77
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 ggtggtgtga gtgcgctgct ttccttcttc gcctggaccg gagccgtcgc 200
 gggaggcacc cccgggggtg gagaaaaagc cggcctggcc tcggaggtgg 250
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<210> 78
 <211> 250
 <212> PRT
 <213> Homo Sapien

<400> 78
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 Asn Leu Gln Glu Ala Glu Arg Asp His Ala Gln Glu Ser Leu Ser
 20 25 30
 Leu Val Asp Ala Ser Trp Glu Leu Val Asp Pro Thr Pro Asp Leu
 35 40 45
 Gln Ala Leu Phe Val Gln Phe Asn Asp Gln Phe Phe Trp Gly Gln
 50 55 60
 Leu Glu Ala Val Glu Val Lys Trp Ser Val Arg Met Thr Leu Cys
 65 70 75
 Ala Gly Ile Cys Ser Tyr Glu Gly Lys Gly Gly Met Cys Ser Ile
 80 85 90
 Arg Leu Ser Glu Pro Leu Leu Lys Leu Arg Pro Arg Lys Asp Leu
 95 100 105
 Val Glu Thr Leu Leu His Glu Met Ile His Ala Tyr Leu Phe Val
 110 115 120
 Thr Asn Asn Asp Lys Asp Arg Glu Gly His Gly Pro Glu Phe Cys
 125 130 135
 Lys His Met His Arg Ile Asn Ser Leu Thr Gly Ala Asn Ile Thr
 140 145 150
 Val Tyr His Thr Phe His Asp Glu Val Asp Glu Tyr Arg Arg His
 155 160 165
 Trp Trp Arg Cys Asn Gly Pro Cys Gln His Arg Pro Pro Tyr Tyr
 170 175 180
 Gly Tyr Val Lys Arg Ala Thr Asn Arg Glu Pro Ser Ala His Asp
 185 190 195
 Tyr Trp Trp Ala Glu His Gln Lys Thr Cys Gly Gly Thr Tyr Ile

	200		205		210
Lys Ile Lys Glu Pro Glu Asn Tyr Ser	Lys Lys Gly Lys Gly Lys				
215	220				225
Ala Lys Leu Gly Lys Glu Pro Val Leu	Ala Ala Glu Asn Lys Gly				
230	235				240
Thr Phe Val Tyr Ile Leu Leu Ile Phe	Met				
245	250				

<210> 79
 <211> 2714
 <212> DNA
 <213> Homo Sapien

<400> 79
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 tccggagcca cgggttttgg ctgaagcgga gcagctacga ggagcagccg 250
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<210> 80
 <211> 316
 <212> PRT
 <213> Homo Sapien

<400> 80
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 Ala Ala Leu Thr Tyr Ile Pro Pro Leu Leu Val Ala Phe Arg Ser
 35 40 45
 His Gly Phe Trp Leu Lys Arg Ser Ser Tyr Glu Glu Gln Pro Thr
 50 55 60
 Val Arg Phe Gln His Gln Val Leu Leu Val Ala Leu Leu Gly Pro
 65 70 75
 Glu Ser Asp Gly Phe Leu Ala Trp Ser Thr Phe Pro Ala Phe Asn
 80 85 90
 Arg Leu Gln Gly Asp Arg Leu Arg Val Pro Leu Val Ser Thr Arg
 95 100 105
 Glu Glu Asp Arg Asn Gln Asp Gly Lys Thr Asp Met Leu His Phe
 110 115 120
 Lys Leu Glu Leu Pro Leu Gln Ser Thr Glu His Val Leu Gly Val
 125 130 135
 Gln Leu Ile Leu Thr Phe Ser Tyr Arg Leu His Arg Met Ala Thr
 140 145 150
 Leu Val Met Gln Ser Met Ala Phe Leu Gln Ser Ser Phe Pro Val
 155 160 165
 Pro Gly Ser Gln Leu Tyr Val Asn Gly Asp Leu Arg Leu Gln Gln
 170 175 180
 Lys Gln Pro Leu Ser Cys Gly Gly Leu Asp Ala Arg Tyr Asn Ile
 185 190 195
 Ser Val Ile Asn Gly Thr Ser Pro Phe Ala Tyr Asp Tyr Asp Leu
 200 205 210

Thr	His	Ile	Val	Ala	Ala	Tyr	Gln	Glu	Arg	Asn	Val	Thr	Thr	Val
				215					220					225
Leu	Asn	Asp	Pro	Asn	Pro	Ile	Trp	Leu	Val	Gly	Arg	Ala	Ala	Asp
				230					235					240
Ala	Pro	Phe	Val	Ile	Asn	Ala	Ile	Ile	Arg	Tyr	Pro	Val	Glu	Val
				245					250					255
Ile	Ser	Tyr	Gln	Pro	Gly	Phe	Trp	Glu	Met	Val	Lys	Phe	Ala	Trp
				260					265					270
Val	Gln	Tyr	Val	Ser	Ile	Leu	Leu	Ile	Phe	Leu	Trp	Val	Phe	Glu
				275					280					285
Arg	Ile	Lys	Ile	Phe	Val	Phe	Gln	Asn	Gln	Val	Val	Thr	Thr	Ile
				290					295					300
Pro	Val	Thr	Val	Thr	Pro	Arg	Gly	Asp	Leu	Cys	Lys	Glu	His	Leu
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Ser

<210> 81
 <211> 3233
 <212> DNA
 <213> Homo Sapien

<400> 81
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 ttgggacaca cgtggaccta cagagaggag ccggaggacg gcgacagaga 150
 aatctgctca gagagcaaaa tcgcgacgac taaatacccg tgtctgaagt 200
 cttcaggcga gctcaccaca tgctacagga aaaagtgctg caaaggatat 250
 aaatttggtc ttggacaatg catcccagaa gattacgacg tttgtgccga 300
 ggctccctgt gaacagcagt gcacggacaa ctttggccga gtgctgtgta 350
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 aggcaacaga gggagactct gtctcattaa aaa 3233

<210> 82

<211> 406

<212> PRT

<213> Homo Sapien

<400> 82

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Leu	Gly	Arg	Ser	Leu	Gly	Pro	Leu	Leu	Leu	Leu	Leu	Ala	Leu	Gly
				20				25					30	
His	Thr	Trp	Thr	Tyr	Arg	Glu	Glu	Pro	Glu	Asp	Gly	Asp	Arg	Glu
				35				40					45	

Ile	Cys	Ser	Glu	Ser	Lys	Ile	Ala	Thr	Thr	Lys	Tyr	Pro	Cys	Leu	50	55	60
Lys	Ser	Ser	Gly	Glu	Leu	Thr	Thr	Cys	Tyr	Arg	Lys	Lys	Cys	Cys	65	70	75
Lys	Gly	Tyr	Lys	Phe	Val	Leu	Gly	Gln	Cys	Ile	Pro	Glu	Asp	Tyr	80	85	90
Asp	Val	Cys	Ala	Glu	Ala	Pro	Cys	Glu	Gln	Gln	Cys	Thr	Asp	Asn	95	100	105
Phe	Gly	Arg	Val	Leu	Cys	Thr	Cys	Tyr	Pro	Gly	Tyr	Arg	Tyr	Asp	110	115	120
Arg	Glu	Arg	His	Arg	Lys	Arg	Glu	Lys	Pro	Tyr	Cys	Leu	Asp	Ile	125	130	135
Asp	Glu	Cys	Ala	Ser	Ser	Asn	Gly	Thr	Leu	Cys	Ala	His	Ile	Cys	140	145	150
Ile	Asn	Thr	Leu	Gly	Ser	Tyr	Arg	Cys	Glu	Cys	Arg	Glu	Gly	Tyr	155	160	165
Ile	Arg	Glu	Asp	Asp	Gly	Lys	Thr	Cys	Thr	Arg	Gly	Asp	Lys	Tyr	170	175	180
Pro	Asn	Asp	Thr	Gly	His	Glu	Lys	Ser	Glu	Asn	Met	Val	Lys	Ala	185	190	195
Gly	Thr	Cys	Cys	Ala	Thr	Cys	Lys	Glu	Phe	Tyr	Gln	Met	Lys	Gln	200	205	210
Thr	Val	Leu	Gln	Leu	Lys	Gln	Lys	Ile	Ala	Leu	Leu	Pro	Asn	Asn	215	220	225
Ala	Ala	Asp	Leu	Gly	Lys	Tyr	Ile	Thr	Gly	Asp	Lys	Val	Leu	Ala	230	235	240
Ser	Asn	Thr	Tyr	Leu	Pro	Gly	Pro	Pro	Gly	Leu	Pro	Gly	Gly	Gln	245	250	255
Gly	Pro	Pro	Gly	Ser	Pro	Gly	Pro	Lys	Gly	Ser	Pro	Gly	Phe	Pro	260	265	270
Gly	Met	Pro	Gly	Pro	Pro	Gly	Gln	Pro	Gly	Pro	Arg	Gly	Ser	Met	275	280	285
Gly	Pro	Met	Gly	Pro	Ser	Pro	Asp	Leu	Ser	His	Ile	Lys	Gln	Gly	290	295	300
Arg	Arg	Gly	Pro	Val	Gly	Pro	Pro	Gly	Ala	Pro	Gly	Arg	Asp	Gly	305	310	315
Ser	Lys	Gly	Glu	Arg	Gly	Ala	Pro	Gly	Pro	Arg	Gly	Ser	Pro	Gly	320	325	330
Pro	Pro	Gly	Ser	Phe	Asp	Phe	Leu	Leu	Leu	Met	Leu	Ala	Asp	Ile			

335	340	345
Arg Asn Asp Ile Thr Glu Leu Gln Glu	Lys Val Phe Gly His Arg	
350	355	360
Thr His Ser Ser Ala Glu Glu Phe Pro	Leu Pro Gln Glu Phe Pro	
365	370	375
Ser Tyr Pro Glu Ala Met Asp Leu Gly	Ser Gly Asp Asp His Pro	
380	385	390
Arg Arg Thr Glu Thr Arg Asp Leu Arg	Ala Pro Arg Asp Phe Tyr	
395	400	405

Pro

<210> 83
 <211> 443
 <212> DNA
 <213> Homo Sapien

<400> 83
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 ctctctctgg ctcttttctg ctttttaaca ggtgtcttca gtcagggagg 100
 acaggttgac tgtggtgagt tccaggaccc caaggtctac tgcactcggg 150
 aatctaaccc aactgtggc tctgatggcc agacatatgg caataaatgt 200
 gccttctgta aggccatagt gaaaagtggg ggaaagatta gcctaaagca 250
 tcctggaaaa tgctgagtta aagccaatgt ttcttggtga cttgccagct 300
 tttgcagcct tcttttctca cttctgctta tacttttgct ggtggattcc 350
 tttaattcat aaagacatac ctactctgcc tgggtcttga ggagttcaat 400
 gtatgtctat ttctcttgat tcacttggtca ataaagtaca ttc 443

<210> 84
 <211> 80
 <212> PRT
 <213> Homo Sapien

<400> 84
 Met Lys Leu Ser Gly Met Phe Leu Leu Leu Ser Leu Ala Leu Phe
 1 5 10 15
 Cys Phe Leu Thr Gly Val Phe Ser Gln Gly Gly Gln Val Asp Cys
 20 25 30
 Gly Glu Phe Gln Asp Pro Lys Val Tyr Cys Thr Arg Glu Ser Asn
 35 40 45
 Pro His Cys Gly Ser Asp Gly Gln Thr Tyr Gly Asn Lys Cys Ala
 50 55 60

Phe Cys Lys Ala Ile Val Lys Ser Gly Gly Lys Ile Ser Leu Lys
65 70 75

His Pro Gly Lys Cys
80

<210> 85
<211> 2750
<212> DNA
<213> Homo Sapien

<400> 85
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cttcttcttc tttttttttt ttttaactta ttgttttttt cgctcctgtc 200
attatgaaag tggtcacgcc attcaatatt aagacttgga gggaattggg 250
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gtgtctaatt ttcaaaagag acgtctggga gtattttgct ctgggcgttt 350
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tgaccatcta ttctgaccag gtattagtaa atattggcaa ccactttgat 950
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accagagaag ctgctagcaa tggcgtgctg ctgctcatgg aaaggaaga 1150

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<210> 86
 <211> 224
 <212> PRT
 <213> Homo Sapien

<400> 86
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 20 25 30
 Cys Leu Gly Val Ala Leu Ala Leu Leu Leu Leu Leu Pro Ala
 35 40 45
 Cys Cys Pro Val Arg Ala Gln Asn Asp Thr Glu Pro Ile Val Leu
 50 55 60
 Glu Gly Lys Cys Leu Val Val Cys Asp Ser Ser Pro Ser Ala Asp
 65 70 75
 Gly Ala Val Thr Ser Ser Leu Gly Ile Ser Val Arg Ser Gly Ser
 80 85 90
 Ala Lys Val Ala Phe Ser Ala Thr Arg Ser Thr Asn His Glu Pro
 95 100 105
 Ser Glu Met Ser Asn Arg Thr Met Thr Ile Tyr Phe Asp Gln Val
 110 115 120
 Leu Val Asn Ile Gly Asn His Phe Asp Leu Ala Ser Ser Ile Phe
 125 130 135
 Val Ala Pro Arg Lys Gly Ile Tyr Ser Phe Ser Phe His Val Val
 140 145 150
 Lys Val Tyr Asn Arg Gln Thr Ile Gln Val Ser Leu Met Gln Asn
 155 160 165
 Gly Tyr Pro Val Ile Ser Ala Phe Ala Gly Asp Gln Asp Val Thr
 170 175 180
 Arg Glu Ala Ala Ser Asn Gly Val Leu Leu Leu Met Glu Arg Glu
 185 190 195
 Asp Lys Val His Leu Lys Leu Glu Arg Gly Asn Leu Met Gly Gly
 200 205 210
 Trp Lys Tyr Ser Thr Phe Ser Gly Phe Leu Val Phe Pro Leu
 215 220

<210> 87

<211> 2159
<212> DNA
<213> Homo Sapien

<400> 87
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<210> 88
<211> 685
<212> PRT
<213> Homo Sapien

<400> 88
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35 40 45
Ser Gly Arg Pro Cys Glu Pro Gly Cys Arg Thr Phe Phe Arg Val
50 55 60
Cys Leu Lys His Phe Gln Ala Val Val Ser Pro Gly Pro Cys Thr
65 70 75
Phe Gly Thr Val Ser Thr Pro Val Leu Gly Thr Asn Ser Phe Ala
80 85 90

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Pro	Phe	Asn	Phe	Thr	Trp	Pro	Gly	Thr	Phe	Ser	Leu	Ile	Ile	Glu	
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Ala	Trp	His	Ala	Pro	Gly	Asp	Asp	Leu	Arg	Pro	Glu	Ala	Leu	Pro	
				125					130					135	
Pro	Asp	Ala	Leu	Ile	Ser	Lys	Ile	Ala	Ile	Gln	Gly	Ser	Leu	Ala	
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Val	Gly	Gln	Asn	Trp	Leu	Leu	Asp	Glu	Gln	Thr	Ser	Thr	Leu	Thr	
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Arg	Leu	Arg	Tyr	Ser	Tyr	Arg	Val	Ile	Cys	Ser	Asp	Asn	Tyr	Tyr	
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Gly	Asp	Asn	Cys	Ser	Arg	Leu	Cys	Lys	Lys	Arg	Asn	Asp	His	Phe	
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Gly	His	Tyr	Val	Cys	Gln	Pro	Asp	Gly	Asn	Leu	Ser	Cys	Leu	Pro	
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Cys	Arg	Pro	Gly	Trp	Gln	Gly	Arg	Leu	Cys	Asn	Glu	Cys	Ile	Pro	
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His	Asn	Gly	Cys	Arg	His	Gly	Thr	Cys	Ser	Thr	Pro	Trp	Gln	Cys	
				260					265					270	
Thr	Cys	Asp	Glu	Gly	Trp	Gly	Gly	Leu	Phe	Cys	Asp	Gln	Asp	Leu	
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Asn	Tyr	Cys	Thr	His	His	Ser	Pro	Cys	Lys	Asn	Gly	Ala	Thr	Cys	
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Ser	Asn	Ser	Gly	Gln	Arg	Ser	Tyr	Thr	Cys	Thr	Cys	Arg	Pro	Gly	
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Ser	Cys	Arg	Glu	Arg	Asn	Gln	Gly	Ala	Asn	Tyr	Ala	Cys	Glu	Cys	

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Pro	Pro	Asn	Phe	Thr	Gly	Ser	Asn	Cys	Glu	Lys	Lys	Val	Asp	Arg	
				395					400					405	
Cys	Thr	Ser	Asn	Pro	Cys	Ala	Asn	Gly	Gly	Gln	Cys	Leu	Asn	Arg	
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Tyr	Cys	Glu	Leu	His	Val	Ser	Asp	Cys	Ala	Arg	Asn	Pro	Cys	Ala	
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Tyr	Thr	Asp	Leu	Ser	Thr	Asp	Thr	Phe	Val	Cys	Asn	Cys	Pro	Tyr	
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Gly	Phe	Val	Gly	Ser	Arg	Cys	Glu	Phe	Pro	Val	Gly	Leu	Pro	Pro	
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Ser	Phe	Pro	Trp	Val	Ala	Val	Ser	Leu	Gly	Val	Gly	Leu	Ala	Val	
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Leu	Leu	Val	Leu	Leu	Gly	Met	Val	Ala	Val	Ala	Val	Arg	Gln	Leu	
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Arg	Leu	Arg	Arg	Pro	Asp	Asp	Gly	Ser	Arg	Glu	Ala	Met	Asn	Asn	
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Leu	Ser	Asp	Phe	Gln	Lys	Asp	Asn	Leu	Ile	Pro	Ala	Ala	Gln	Leu	
				575					580					585	
Lys	Asn	Thr	Asn	Gln	Lys	Lys	Glu	Leu	Glu	Val	Asp	Cys	Gly	Leu	
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Asp	Lys	Ser	Asn	Cys	Gly	Lys	Gln	Gln	Asn	His	Thr	Leu	Asp	Tyr	
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Asn	Leu	Ala	Pro	Gly	Pro	Leu	Gly	Arg	Gly	Thr	Met	Pro	Gly	Lys	
				620					625					630	
Phe	Pro	His	Ser	Asp	Lys	Ser	Leu	Gly	Glu	Lys	Ala	Pro	Leu	Arg	
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Leu	His	Ser	Glu	Lys	Pro	Glu	Cys	Arg	Ile	Ser	Ala	Ile	Cys	Ser	
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Pro	Arg	Asp	Ser	Met	Tyr	Gln	Ser	Val	Cys	Leu	Ile	Ser	Glu	Glu	
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<210> 89
<211> 1893
<212> DNA
<213> Homo Sapien

<400> 89
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cataacaaaa gctacagctc caggagccca gcgccgggct gtgacccaag 250
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ttagtgctcc cgattcaagc tttcccaaaa cctggaggaa gccaagacaa 350
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aagccaggtc agagcaacta ttcttttggt gataacttga acctgctaaa 500
ggcaataaca gaaaaggaaa aaattgagaa agaaagacaa tctataagaa 550
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tttctatgcy ctactgaaaa gtattgattc agaaaaagaa gcaaaagaga 1150
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atggtgaaat atggaacaat atctccagaa gaaggtgttt cctaccttga 1250

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catgaagaaa cagacagtac caaggaagaa gcagctaaga tggaaaagga 1400
atatggaagc ttgaaggatt ccacaaaaga tgataactcc aacccaggag 1450
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aaagtaaagt tgtatgtaag ctgaaaaaaaa aaaaaaaaaa aaa 1893

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<210> 90
<211> 468
<212> PRT
<213> Homo Sapien

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Leu His Asn Arg Glu Leu Ser Ala Glu Arg Pro Leu Asn Glu Gln
                35                      40          45

Ile Ala Glu Ala Glu Glu Asp Lys Ile Lys Lys Thr Tyr Pro Pro
                50                      55          60

Glu Asn Lys Pro Gly Gln Ser Asn Tyr Ser Phe Val Asp Asn Leu
                65                      70          75

Asn Leu Leu Lys Ala Ile Thr Glu Lys Glu Lys Ile Glu Lys Glu
                80                      85          90

Arg Gln Ser Ile Arg Ser Ser Pro Leu Asp Asn Lys Leu Asn Val
                95                      100         105

Glu Asp Val Asp Ser Thr Lys Asn Arg Lys Leu Ile Asp Asp Tyr
                110                      115         120

Asp Ser Thr Lys Ser Gly Leu Asp His Lys Phe Gln Asp Asp Pro
                125                      130         135

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Asp	Gly	Leu	His	Gln	Leu	Asp	Gly	Thr	Pro	Leu	Thr	Ala	Glu	Asp	
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Ile	Val	His	Lys	Ile	Ala	Ala	Arg	Ile	Tyr	Glu	Glu	Asn	Asp	Arg	
				155					160					165	
Ala	Val	Phe	Asp	Lys	Ile	Val	Ser	Lys	Leu	Leu	Asn	Leu	Gly	Leu	
				170					175					180	
Ile	Thr	Glu	Ser	Gln	Ala	His	Thr	Leu	Glu	Asp	Glu	Val	Ala	Glu	
				185					190					195	
Val	Leu	Gln	Lys	Leu	Ile	Ser	Lys	Glu	Ala	Asn	Asn	Tyr	Glu	Glu	
				200					205					210	
Asp	Pro	Asn	Lys	Pro	Thr	Ser	Trp	Thr	Glu	Asn	Gln	Ala	Gly	Lys	
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Ile	Pro	Glu	Lys	Val	Thr	Pro	Met	Ala	Ala	Ile	Gln	Asp	Gly	Leu	
				230					235					240	
Ala	Lys	Gly	Glu	Asn	Asp	Glu	Thr	Val	Ser	Asn	Thr	Leu	Thr	Leu	
				245					250					255	
Thr	Asn	Gly	Leu	Glu	Arg	Arg	Thr	Lys	Thr	Tyr	Ser	Glu	Asp	Asn	
				260					265					270	
Phe	Glu	Glu	Leu	Gln	Tyr	Phe	Pro	Asn	Phe	Tyr	Ala	Leu	Leu	Lys	
				275					280					285	
Ser	Ile	Asp	Ser	Glu	Lys	Glu	Ala	Lys	Glu	Lys	Glu	Thr	Leu	Ile	
				290					295					300	
Thr	Ile	Met	Lys	Thr	Leu	Ile	Asp	Phe	Val	Lys	Met	Met	Val	Lys	
				305					310					315	
Tyr	Gly	Thr	Ile	Ser	Pro	Glu	Glu	Gly	Val	Ser	Tyr	Leu	Glu	Asn	
				320					325					330	
Leu	Asp	Glu	Met	Ile	Ala	Leu	Gln	Thr	Lys	Asn	Lys	Leu	Glu	Lys	
				335					340					345	
Asn	Ala	Thr	Asp	Asn	Ile	Ser	Lys	Leu	Phe	Pro	Ala	Pro	Ser	Glu	
				350					355					360	
Lys	Ser	His	Glu	Glu	Thr	Asp	Ser	Thr	Lys	Glu	Glu	Ala	Ala	Lys	
				365					370					375	
Met	Glu	Lys	Glu	Tyr	Gly	Ser	Leu	Lys	Asp	Ser	Thr	Lys	Asp	Asp	
				380					385					390	
Asn	Ser	Asn	Pro	Gly	Gly	Lys	Thr	Asp	Glu	Pro	Lys	Gly	Lys	Thr	
				395					400					405	
Glu	Ala	Tyr	Leu	Glu	Ala	Ile	Arg	Lys	Asn	Ile	Glu	Trp	Leu	Lys	
				410					415					420	
Lys	His	Asp	Lys	Lys	Gly	Asn	Lys	Glu	Asp	Tyr	Asp	Leu	Ser	Lys	

	425		430		435
Met Arg Asp Phe Ile Asn Lys Gln Ala Asp Ala Tyr Val Glu Lys					
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Gly Ile Leu Asp Lys Glu Glu Ala Glu Ala Ile Lys Arg Ile Tyr					
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Ser Ser Leu					

<210> 91
 <211> 1240
 <212> DNA
 <213> Homo Sapien

<400> 91
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 aactcatgag gaccatccct aggggttctg tgcattccatc cagccagctc 1000
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1240

<210> 92
 <211> 199
 <212> PRT
 <213> Homo Sapien

<400> 92
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 35 40 45
 Lys Ala Gln Lys Val Trp Cys Arg Phe Leu Pro Glu Gly Cys Gln
 50 55 60
 Pro Leu Val Ser Ser Ala Val Asp Arg Arg Ala Pro Ala Gly Arg
 65 70 75
 Arg Thr Phe Leu Thr Asp Leu Gly Gly Gly Leu Leu Gln Val Glu
 80 85 90
 Met Val Thr Leu Gln Glu Glu Asp Ala Gly Glu Tyr Gly Cys Met
 95 100 105
 Val Asp Gly Ala Arg Gly Pro Gln Ile Leu His Arg Val Ser Leu
 110 115 120
 Asn Ile Leu Pro Pro Glu Glu Glu Glu Glu Thr His Lys Ile Gly
 125 130 135
 Ser Leu Ala Glu Asn Ala Phe Ser Asp Pro Ala Gly Ser Ala Asn
 140 145 150
 Pro Leu Glu Pro Ser Gln Asp Glu Lys Ser Ile Pro Leu Ile Trp
 155 160 165
 Gly Ala Val Leu Leu Val Gly Leu Leu Val Ala Ala Val Val Leu
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 Phe Ala Val Met Ala Lys Arg Lys Gln Glu Ser Leu Leu Ser Gly
 185 190 195
 Pro Pro Arg Gln

<210> 93
 <211> 2285

<212> DNA
<213> Homo Sapien

<400> 93

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<210> 94
 <211> 429
 <212> PRT
 <213> Homo Sapien

<400> 94
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 Gly Arg Ala Leu Pro Gln Leu Ser Asp Asp Ile Pro Phe Arg Val
 35 40 45
 Asn Trp Pro Gly Thr Glu Phe Ser Leu Pro Thr Thr Gly Val Leu
 50 55 60
 Tyr Lys Glu Asp Asn Tyr Val Ile Met Thr Thr Ala His Lys Glu
 65 70 75

Lys	Tyr	Lys	Cys	Ile	Leu	Pro	Leu	Val	Thr	Ser	Gly	Asp	Glu	Glu	
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Glu	Glu	Lys	Asp	Tyr	Lys	Gly	Pro	Asn	Pro	Arg	Glu	Leu	Leu	Glu	
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Pro	Leu	Phe	Lys	Gln	Ser	Ser	Cys	Ser	Tyr	Arg	Ile	Glu	Ser	Tyr	
				110					115					120	
Trp	Thr	Tyr	Glu	Val	Cys	His	Gly	Lys	His	Ile	Arg	Gln	Tyr	His	
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Glu	Glu	Lys	Glu	Thr	Gly	Gln	Lys	Ile	Asn	Ile	His	Glu	Tyr	Tyr	
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Leu	Gly	Asn	Met	Leu	Ala	Lys	Asn	Leu	Leu	Phe	Glu	Lys	Glu	Arg	
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Glu	Ala	Glu	Glu	Lys	Glu	Lys	Ser	Asn	Glu	Ile	Pro	Thr	Lys	Asn	
				170					175					180	
Ile	Glu	Gly	Gln	Met	Thr	Pro	Tyr	Tyr	Pro	Val	Gly	Met	Gly	Asn	
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Gly	Thr	Pro	Cys	Ser	Leu	Lys	Gln	Asn	Arg	Pro	Arg	Ser	Ser	Thr	
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Val	Met	Tyr	Ile	Cys	His	Pro	Glu	Ser	Lys	His	Glu	Ile	Leu	Ser	
				215					220					225	
Val	Ala	Glu	Val	Thr	Thr	Cys	Glu	Tyr	Glu	Val	Val	Ile	Leu	Thr	
				230					235					240	
Pro	Leu	Leu	Cys	Ser	His	Pro	Lys	Tyr	Arg	Phe	Arg	Ala	Ser	Pro	
				245					250					255	
Val	Asn	Asp	Ile	Phe	Cys	Gln	Ser	Leu	Pro	Gly	Ser	Pro	Phe	Lys	
				260					265					270	
Pro	Leu	Thr	Leu	Arg	Gln	Leu	Glu	Gln	Gln	Glu	Glu	Ile	Leu	Arg	
				275					280					285	
Val	Pro	Phe	Arg	Arg	Asn	Lys	Glu	Gly	Val	Gly	Trp	Trp	Lys	Tyr	
				290					295					300	
Glu	Phe	Cys	Tyr	Gly	Lys	His	Val	His	Gln	Tyr	His	Glu	Asp	Lys	
				305					310					315	
Asp	Ser	Gly	Lys	Thr	Ser	Val	Val	Val	Gly	Thr	Trp	Asn	Gln	Glu	
				320					325					330	
Glu	His	Ile	Glu	Trp	Ala	Lys	Lys	Asn	Thr	Ala	Arg	Ala	Tyr	His	
				335					340					345	
Leu	Gln	Asp	Asp	Gly	Thr	Gln	Thr	Val	Arg	Met	Val	Ser	His	Phe	
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Tyr	Gly	Asn	Gly	Asp	Ile	Cys	Asp	Ile	Thr	Asp	Lys	Pro	Arg	Gln	

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Val Thr Val Lys Leu Lys Cys Lys Glu Ser Asp Ser Pro His Ala					
	380		385		390
Val Thr Val Tyr Met Leu Glu Pro His Ser Cys Gln Tyr Ile Leu					
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<210> 95
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 aaaaacattt cttcccattg gcatacatcc catgtctctg cacaatcctt 450
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 tgtgggtgtg ggagccagcc gtatcagaaa tcttttttagg gaagcaaagg 1250
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 <212> PRT
 <213> Homo Sapien

<400> 96
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 35 40 45
 Val Val Pro Glu His Glu Ala Pro Ser Ser Glu Pro Ser Leu Asn
 50 55 60
 Leu Arg Asp Leu Gly Leu Ser Glu Leu Lys Ile Gly Gln Ile Asp
 65 70 75
 Gln Leu Val Glu Asn Leu Leu Pro Gly Phe Cys Lys Gly Lys Asn
 80 85 90
 Ile Ser Ser His Trp His Thr Ser His Val Ser Ala Gln Ser Phe
 95 100 105
 Phe Glu Asn Lys Tyr Gly Asn Leu Asp Ile Phe Ser Thr Leu Arg
 110 115 120
 Ser Ser Cys Leu Tyr Arg His His Ser Arg Ala Leu Gln Ser Ile
 125 130 135
 Cys Ser Asp Leu Gln Tyr Trp Pro Val Phe Ile Gln Ser Arg Gly
 140 145 150
 Phe Lys Thr Leu Lys Ser Arg Thr Arg Arg Leu Gln Ser Thr Ser
 155 160 165
 Glu Arg Leu Ala Glu Thr Gln Asn Ile Ala Pro Ser Phe Val Lys
 170 175 180
 Gly Phe Leu Leu Arg Asp Arg Gly Ser Asp Val Glu Ser Leu Asp
 185 190 195
 Lys Leu Met Lys Thr Lys Asn Ile Pro Glu Ala His Gln Asp Ala
 200 205 210
 Phe Lys Thr Gly Phe Ala Glu Gly Phe Leu Lys Ala Gln Ala Leu
 215 220 225
 Thr Gln Lys Thr Asn Asp Ser Leu Arg Arg Thr Arg Leu Ile Leu

				230					235					240
Phe	Val	Leu	Leu	Leu	Phe	Gly	Ile	Tyr	Gly	Leu	Leu	Lys	Asn	Pro
				245					250					255
Phe	Leu	Ser	Val	Arg	Phe	Arg	Thr	Thr	Thr	Gly	Leu	Asp	Ser	Ala
				260					265					270
Val	Asp	Pro	Val	Gln	Met	Lys	Asn	Val	Thr	Phe	Glu	His	Val	Lys
				275					280					285
Gly	Val	Glu	Glu	Ala	Lys	Gln	Glu	Leu	Gln	Glu	Val	Val	Glu	Phe
				290					295					300
Leu	Lys	Asn	Pro	Gln	Lys	Phe	Thr	Ile	Leu	Gly	Gly	Lys	Leu	Pro
				305					310					315
Lys	Gly	Ile	Leu	Leu	Val	Gly	Pro	Pro	Gly	Thr	Gly	Lys	Thr	Leu
				320					325					330
Leu	Ala	Arg	Ala	Val	Ala	Gly	Glu	Ala	Asp	Val	Pro	Phe	Tyr	Tyr
				335					340					345
Ala	Ser	Gly	Ser	Glu	Phe	Asp	Glu	Met	Phe	Val	Gly	Val	Gly	Ala
				350					355					360
Ser	Arg	Ile	Arg	Asn	Leu	Phe	Arg	Glu	Ala	Lys	Ala	Asn	Ala	Pro
				365					370					375
Cys	Val	Ile	Phe	Ile	Asp	Glu	Leu	Asp	Ser	Val	Gly	Gly	Lys	Arg
				380					385					390
Ile	Glu	Ser	Pro	Met	His	Pro	Tyr	Ser	Arg	Gln	Thr	Ile	Asn	Gln
				395					400					405
Leu	Leu	Ala	Glu	Met	Asp	Gly	Phe	Lys	Pro	Asn	Glu	Gly	Val	Ile
				410					415					420
Ile	Ile	Gly	Ala	Thr	Asn	Phe	Pro	Glu	Ala	Leu	Asp	Asn	Ala	Leu
				425					430					435
Ile	Arg	Pro	Gly	Arg	Phe	Asp	Met	Gln	Val	Thr	Val	Pro	Arg	Pro
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Asp	Val	Lys	Gly	Arg	Thr	Glu	Ile	Leu	Lys	Trp	Tyr	Leu	Asn	Lys
				455					460					465
Ile	Lys	Phe	Asp	Gln	Ser	Val	Asp	Pro	Glu	Ile	Ile	Ala	Arg	Gly
				470					475					480
Thr	Val	Gly	Phe	Ser	Gly	Ala	Glu	Leu	Glu	Asn	Leu	Val	Asn	Gln
				485					490					495
Ala	Ala	Leu	Lys	Ala	Ala	Val	Asp	Gly	Lys	Glu	Met	Val	Thr	Met
				500					505					510
Lys	Glu	Leu	Glu	Phe	Ser	Lys	Asp	Lys	Ile	Leu	Met	Gly	Pro	Glu
				515					520					525

Arg	Arg	Ser	Val	Glu	Ile	Asp	Asn	Lys	Asn	Lys	Thr	Ile	Thr	Ala
				530					535					540
Tyr	His	Glu	Ser	Gly	His	Ala	Ile	Ile	Ala	Tyr	Tyr	Thr	Lys	Asp
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Ala	Met	Pro	Ile	Asn	Lys	Ala	Thr	Ile	Met	Pro	Arg	Gly	Pro	Thr
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Leu	Gly	His	Val	Ser	Leu	Leu	Pro	Glu	Asn	Asp	Arg	Trp	Asn	Glu
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Thr	Arg	Ala	Gln	Leu	Leu	Ala	Gln	Met	Asp	Val	Ser	Met	Gly	Gly
				590					595					600
Arg	Val	Ala	Glu	Glu	Leu	Ile	Phe	Gly	Thr	Asp	His	Ile	Thr	Thr
				605					610					615
Gly	Ala	Ser	Ser	Asp	Phe	Asp	Asn	Ala	Thr	Lys	Ile	Ala	Lys	Arg
				620					625					630
Met	Val	Thr	Lys	Phe	Gly	Met	Ser	Glu	Lys	Leu	Gly	Val	Met	Thr
				635					640					645
Tyr	Ser	Asp	Thr	Gly	Lys	Leu	Ser	Pro	Glu	Thr	Gln	Ser	Ala	Ile
				650					655					660
Glu	Gln	Glu	Ile	Arg	Ile	Leu	Leu	Arg	Asp	Ser	Tyr	Glu	Arg	Ala
				665					670					675
Lys	His	Ile	Leu	Lys	Thr	His	Ala	Lys	Glu	His	Lys	Asn	Leu	Ala
				680					685					690
Glu	Ala	Leu	Leu	Thr	Tyr	Glu	Thr	Leu	Asp	Ala	Lys	Glu	Ile	Gln
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 <212> DNA
 <213> Homo Sapien

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 ctgctgggca ctaacggcgg agccaggatg gggacagaat aaaggagcca 250
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gatgctctgt gagatatttg aaattgaacc aatgactact taggatgggt 1400
tgtggaataa gttttgatgt ggaattgcac atctacctta caattactga 1450
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 <211> 176
 <212> PRT
 <213> Homo Sapien

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Gly	Ser	Cys	Val	Ile	Ala	Thr	Asn	Leu	Gln	Glu	Ile	Arg	Asn	Gly
				35					40					45
Phe	Ser	Glu	Ile	Arg	Gly	Ser	Val	Gln	Ala	Lys	Asp	Gly	Asn	Ile
				50					55					60
Asp	Ile	Arg	Ile	Leu	Arg	Arg	Thr	Glu	Ser	Leu	Gln	Asp	Thr	Lys
				65					70					75
Pro	Ala	Asn	Arg	Cys	Cys	Leu	Leu	Arg	His	Leu	Leu	Arg	Leu	Tyr
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Leu	Asp	Arg	Val	Phe	Lys	Asn	Tyr	Gln	Thr	Pro	Asp	His	Tyr	Thr
				95					100					105
Leu	Arg	Lys	Ile	Ser	Ser	Leu	Ala	Asn	Ser	Phe	Leu	Thr	Ile	Lys
				110					115					120
Lys	Asp	Leu	Arg	Leu	Cys	His	Ala	His	Met	Thr	Cys	His	Cys	Gly
				125					130					135
Glu	Glu	Ala	Met	Lys	Lys	Tyr	Ser	Gln	Ile	Leu	Ser	His	Phe	Glu
				140					145					150
Lys	Leu	Glu	Pro	Gln	Ala	Ala	Val	Val	Lys	Ala	Leu	Gly	Glu	Leu
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Asp	Ile	Leu	Leu	Gln	Trp	Met	Glu	Glu	Thr	Glu				
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 <212> DNA
 <213> Homo Sapien

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 <211> 308
 <212> PRT
 <213> Homo Sapien

<400> 100

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				20					25					30
Pro	Gln	Tyr	Leu	Gly	Leu	Arg	Pro	Ala	Ala	Ala	Gly	Ala	Gly	Ala
				35					40					45
Pro	Gly	Gln	Gln	Leu	Pro	Glu	Pro	Arg	Ser	Ser	Asp	Gly	Leu	Gly
				50					55					60
Val	Gly	Arg	Ala	Trp	Ser	Trp	Ala	Trp	Pro	Thr	Asn	His	Thr	Gly
				65					70					75
Ala	Leu	Ala	Arg	Ala	Gly	Ala	Ala	Gly	Ala	Leu	Pro	Ala	Gln	Arg
				80					85					90
Thr	Lys	Arg	Lys	Pro	Ser	Ile	Lys	Ala	Ala	Arg	Ala	Lys	Lys	Ile
				95					100					105
Phe	Gly	Trp	Gly	Asp	Phe	Tyr	Phe	Arg	Val	His	Thr	Leu	Lys	Phe
				110					115					120
Ser	Leu	Leu	Val	Thr	Gly	Lys	Ile	Val	Asp	His	Val	Asn	Gly	Thr
				125					130					135
Phe	Ser	Val	Tyr	Phe	Arg	His	Asn	Ser	Ser	Ser	Leu	Gly	Asn	Leu
				140					145					150
Ser	Val	Ser	Ile	Val	Pro	Pro	Ser	Lys	Arg	Val	Glu	Phe	Gly	Gly
				155					160					165
Val	Trp	Leu	Pro	Gly	Pro	Val	Pro	His	Pro	Leu	Gln	Ser	Thr	Leu
				170					175					180
Ala	Leu	Glu	Gly	Val	Leu	Pro	Gly	Leu	Gly	Pro	Pro	Leu	Gly	Met
				185					190					195
Ala	Ala	Ala	Ala	Ala	Gly	Pro	Gly	Leu	Gly	Gly	Ser	Leu	Gly	Gly
				200					205					210
Ala	Leu	Ala	Gly	Pro	Leu	Gly	Gly	Ala	Leu	Gly	Val	Pro	Gly	Ala
				215					220					225
Lys	Glu	Ser	Arg	Ala	Phe	Asn	Cys	His	Val	Glu	Tyr	Glu	Lys	Thr
				230					235					240
Asn	Arg	Ala	Arg	Lys	His	Arg	Pro	Cys	Leu	Tyr	Asp	Pro	Ser	Gln
				245					250					255
Val	Cys	Phe	Thr	Glu	His	Thr	Gln	Ser	Gln	Ala	Ala	Trp	Leu	Cys

	260		265		270									
Ala	Lys	Pro	Phe	Lys	Val	Ile	Cys	Ile	Phe	Val	Ser	Phe	Leu	Ser
	275								280					285
Phe	Asp	Tyr	Lys	Leu	Val	Gln	Lys	Val	Cys	Pro	Asp	Tyr	Asn	Phe
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Gln	Ser	Glu	His	Pro	Tyr	Phe	Gly							
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 <211> 2031
 <212> DNA
 <213> Homo Sapien

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 <221> unsure
 <222> 2020
 <223> unknown base

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 acagtgggtcc ctactctcgt gactccctcg gccctggga ataggactgt 250
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 aggacagttt tctccttctg cttccaggc agcgtaaggt cttcaagctg 400
 ggtttgtgta gacaactctg ttatcttcag gagtaattcc ccgtttcctt 450
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 agctgtacct tggattcagc cctcaatgct gcctcttact ataacttcac 850
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<210> 102
 <211> 607
 <212> PRT
 <213> Homo Sapien

<400> 102
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 Phe Pro Asp Gly Val Arg Pro Gln Pro Ser Ser Ser Pro Ser Gly
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Ala	Val	Pro	Thr	Ser	Leu	Glu	Leu	Gln	Arg	Gly	Thr	Asp	Gly	Gly	
				35					40					45	
Thr	Leu	Gln	Ser	Pro	Ser	Glu	Ala	Thr	Ala	Thr	Arg	Pro	Ala	Val	
				50					55					60	
Pro	Gly	Leu	Pro	Thr	Val	Val	Pro	Thr	Leu	Val	Thr	Pro	Ser	Ala	
				65					70					75	
Pro	Gly	Asn	Arg	Thr	Val	Asp	Leu	Phe	Pro	Val	Leu	Pro	Ile	Cys	
				80					85					90	
Val	Cys	Asp	Leu	Thr	Pro	Gly	Ala	Cys	Asp	Ile	Asn	Cys	Cys	Cys	
				95					100					105	
Asp	Arg	Asp	Cys	Tyr	Leu	Leu	His	Pro	Arg	Thr	Val	Phe	Ser	Phe	
				110					115					120	
Cys	Leu	Pro	Gly	Ser	Val	Arg	Ser	Ser	Ser	Trp	Val	Cys	Val	Asp	
				125					130					135	
Asn	Ser	Val	Ile	Phe	Arg	Ser	Asn	Ser	Pro	Phe	Pro	Ser	Arg	Val	
				140					145					150	
Phe	Met	Asp	Ser	Asn	Gly	Ile	Arg	Gln	Phe	Cys	Val	His	Val	Asn	
				155					160					165	
Asn	Ser	Asn	Leu	Asn	Tyr	Phe	Gln	Lys	Leu	Gln	Lys	Val	Asn	Ala	
				170					175					180	
Thr	Asn	Phe	Gln	Ala	Leu	Ala	Ala	Glu	Phe	Gly	Gly	Glu	Ser	Phe	
				185					190					195	
Thr	Ser	Thr	Phe	Gln	Thr	Gln	Ser	Pro	Pro	Ser	Phe	Tyr	Arg	Ala	
				200					205					210	
Gly	Asp	Pro	Ile	Leu	Thr	Tyr	Phe	Pro	Lys	Trp	Ser	Val	Ile	Ser	
				215					220					225	
Leu	Leu	Arg	Gln	Pro	Ala	Gly	Val	Gly	Ala	Gly	Gly	Leu	Cys	Ala	
				230					235					240	
Glu	Ser	Asn	Pro	Ala	Gly	Phe	Leu	Glu	Ser	Lys	Ser	Thr	Thr	Cys	
				245					250					255	
Thr	Arg	Phe	Phe	Lys	Asn	Leu	Ala	Ser	Ser	Cys	Thr	Leu	Asp	Ser	
				260					265					270	
Ala	Leu	Asn	Ala	Ala	Ser	Tyr	Tyr	Asn	Phe	Thr	Val	Leu	Lys	Val	
				275					280					285	
Pro	Arg	Ser	Met	Thr	Asp	Pro	Gln	Asn	Met	Glu	Phe	Gln	Val	Pro	
				290					295					300	
Val	Ile	Leu	Thr	Ser	Gln	Ala	Asn	Ala	Pro	Leu	Leu	Ala	Gly	Asn	
				305					310					315	
Thr	Cys	Gln	Asn	Val	Val	Ser	Gln	Val	Thr	Tyr	Glu	Ile	Glu	Thr	

				320					325					330
Asn	Gly	Thr	Phe	Gly	Ile	Gln	Lys	Val	Ser	Val	Ser	Leu	Gly	Gln
				335					340					345
Thr	Asn	Leu	Thr	Val	Glu	Pro	Gly	Ala	Ser	Leu	Gln	Gln	His	Phe
				350					355					360
Ile	Leu	Arg	Phe	Arg	Ala	Phe	Gln	Gln	Ser	Thr	Ala	Ala	Ser	Leu
				365					370					375
Thr	Ser	Pro	Arg	Ser	Gly	Asn	Pro	Gly	Tyr	Ile	Val	Gly	Lys	Pro
				380					385					390
Leu	Leu	Ala	Leu	Thr	Asp	Asp	Ile	Ser	Tyr	Ser	Met	Thr	Leu	Leu
				395					400					405
Gln	Ser	Gln	Gly	Asn	Gly	Ser	Cys	Ser	Val	Lys	Arg	His	Glu	Val
				410					415					420
Gln	Phe	Gly	Val	Asn	Ala	Ile	Ser	Gly	Cys	Lys	Leu	Arg	Leu	Lys
				425					430					435
Lys	Ala	Asp	Cys	Ser	His	Leu	Gln	Gln	Glu	Ile	Tyr	Gln	Thr	Leu
				440					445					450
His	Gly	Arg	Pro	Arg	Pro	Glu	Tyr	Val	Ala	Ile	Phe	Gly	Asn	Ala
				455					460					465
Asp	Pro	Ala	Gln	Lys	Gly	Gly	Trp	Thr	Arg	Ile	Leu	Asn	Arg	His
				470					475					480
Cys	Ser	Ile	Ser	Ala	Ile	Asn	Cys	Thr	Ser	Cys	Cys	Leu	Ile	Pro
				485					490					495
Val	Ser	Leu	Glu	Ile	Gln	Val	Leu	Trp	Ala	Tyr	Val	Gly	Leu	Leu
				500					505					510
Ser	Asn	Pro	Gln	Ala	His	Val	Ser	Gly	Val	Arg	Phe	Leu	Tyr	Gln
				515					520					525
Cys	Gln	Ser	Ile	Gln	Asp	Ser	Gln	Gln	Val	Thr	Glu	Val	Ser	Leu
				530					535					540
Thr	Thr	Leu	Val	Asn	Phe	Val	Asp	Ile	Thr	Gln	Lys	Pro	Gln	Pro
				545					550					555
Pro	Arg	Gly	Gln	Pro	Lys	Met	Asp	Trp	Lys	Trp	Pro	Phe	Asp	Phe
				560					565					570
Phe	Pro	Phe	Lys	Val	Ala	Phe	Ser	Arg	Gly	Val	Phe	Ser	Gln	Lys
				575					580					585
Cys	Ser	Val	Ser	Pro	Ile	Leu	Ile	Leu	Cys	Leu	Leu	Leu	Leu	Gly
				590					595					600
Val	Leu	Asn	Leu	Glu	Thr	Met								
				605										

<210> 103
<211> 2099
<212> DNA
<213> Homo Sapien

<400> 103
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catcttccag gaaggcctga cctcagttgt tccagggtaa agaatttggg 250
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<210> 104
 <211> 212
 <212> PRT
 <213> Homo Sapien

<400> 104
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 His Ser Leu Cys Phe Asn Phe Thr Ile Lys Ser Leu Ser Arg Pro
 35 40 45
 Gly Gln Pro Trp Cys Glu Ala Gln Val Phe Leu Asn Lys Asn Leu
 50 55 60
 Phe Leu Gln Tyr Asn Ser Asp Asn Asn Met Val Lys Pro Leu Gly
 65 70 75
 Leu Leu Gly Lys Lys Val Tyr Ala Thr Ser Thr Trp Gly Glu Leu
 80 85 90
 Thr Gln Thr Leu Gly Glu Val Gly Arg Asp Leu Arg Met Leu Leu
 95 100 105

Cys	Asp	Ile	Lys	Pro	Gln	Ile	Lys	Thr	Ser	Asp	Pro	Ser	Thr	Leu
				110					115					120
Gln	Val	Glu	Met	Phe	Cys	Gln	Arg	Glu	Ala	Glu	Arg	Cys	Thr	Gly
				125					130					135
Ala	Ser	Trp	Gln	Phe	Ala	Thr	Asn	Gly	Glu	Lys	Ser	Leu	Leu	Phe
				140					145					150
Asp	Ala	Met	Asn	Met	Thr	Trp	Thr	Val	Ile	Asn	His	Glu	Ala	Ser
				155					160					165
Lys	Ile	Lys	Glu	Thr	Trp	Lys	Lys	Asp	Arg	Gly	Leu	Glu	Lys	Tyr
				170					175					180
Phe	Arg	Lys	Leu	Ser	Lys	Gly	Asp	Cys	Asp	His	Trp	Leu	Arg	Glu
				185					190					195
Phe	Leu	Gly	His	Trp	Glu	Ala	Met	Pro	Glu	Pro	Thr	Gly	Arg	Arg
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Ser Thr

<210> 105
 <211> 1975
 <212> DNA
 <213> Homo Sapien

<400> 105
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tttcacaagt atgtctacac actgg 1975

<210> 106
<211> 372
<212> PRT
<213> Homo Sapien

<400> 106

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Pro	Pro	Leu	Leu	Leu	Gly	Val	Leu	His	Pro	Asn	Thr	Lys	Leu	Arg	35	40	45	
Gln	Ala	Glu	Arg	Leu	Phe	Glu	Asn	Gln	Leu	Val	Gly	Pro	Glu	Ser	50	55	60	
Ile	Ala	His	Ile	Gly	Asp	Val	Met	Phe	Thr	Gly	Thr	Ala	Asp	Gly	65	70	75	
Arg	Val	Val	Lys	Leu	Glu	Asn	Gly	Glu	Ile	Glu	Thr	Ile	Ala	Arg	80	85	90	
Phe	Gly	Ser	Gly	Pro	Cys	Lys	Thr	Arg	Asp	Asp	Glu	Pro	Val	Cys	95	100	105	
Gly	Arg	Pro	Leu	Gly	Ile	Arg	Ala	Gly	Pro	Asn	Gly	Thr	Leu	Phe	110	115	120	
Val	Ala	Asp	Ala	Tyr	Lys	Gly	Leu	Phe	Glu	Val	Asn	Pro	Trp	Lys	125	130	135	
Arg	Glu	Val	Lys	Leu	Leu	Leu	Ser	Ser	Glu	Thr	Pro	Ile	Glu	Gly	140	145	150	
Lys	Asn	Met	Ser	Phe	Val	Asn	Asp	Leu	Thr	Val	Thr	Gln	Asp	Gly	155	160	165	
Arg	Lys	Ile	Tyr	Phe	Thr	Asp	Ser	Ser	Ser	Lys	Trp	Gln	Arg	Arg	170	175	180	
Asp	Tyr	Leu	Leu	Leu	Val	Met	Glu	Gly	Thr	Asp	Asp	Gly	Arg	Leu	185	190	195	
Leu	Glu	Tyr	Asp	Thr	Val	Thr	Arg	Glu	Val	Lys	Val	Leu	Leu	Asp	200	205	210	
Gln	Leu	Arg	Phe	Pro	Asn	Gly	Val	Gln	Leu	Ser	Pro	Ala	Glu	Asp	215	220	225	
Phe	Val	Leu	Val	Ala	Glu	Thr	Thr	Met	Ala	Arg	Ile	Arg	Arg	Val	230	235	240	
Tyr	Val	Ser	Gly	Leu	Met	Lys	Gly	Gly	Ala	Asp	Leu	Phe	Val	Glu	245	250	255	
Asn	Met	Pro	Gly	Phe	Pro	Asp	Asn	Ile	Arg	Pro	Ser	Ser	Ser	Gly	260	265	270	
Gly	Tyr	Trp	Val	Gly	Met	Ser	Thr	Ile	Arg	Pro	Asn	Pro	Gly	Phe	275	280	285	
Ser	Met	Leu	Asp	Phe	Leu	Ser	Glu	Arg	Pro	Trp	Ile	Lys	Arg	Met				

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Ile Phe Lys Leu Phe Ser Gln Glu Thr Val Met Lys Phe Val Pro					
	305		310		315
Arg Tyr Ser Leu Val Leu Glu Leu Ser Asp Ser Gly Ala Phe Arg					
	320		325		330
Arg Ser Leu His Asp Pro Asp Gly Leu Val Ala Thr Tyr Ile Ser					
	335		340		345
Glu Val His Glu His Asp Gly His Leu Tyr Leu Gly Ser Phe Arg					
	350		355		360
Ser Pro Phe Leu Cys Arg Leu Ser Leu Gln Ala Val					
	365		370		

<210> 107
 <211> 2343
 <212> DNA
 <213> Homo Sapien

<400> 107
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<210> 108
 <211> 509
 <212> PRT
 <213> Homo Sapien

<400> 108

Met	Glu	Phe	Ser	Trp	Leu	Glu	Thr	Arg	Trp	Ala	Arg	Pro	Phe	Tyr
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Leu	Ala	Phe	Val	Phe	Cys	Leu	Ala	Leu	Gly	Leu	Leu	Gln	Ala	Ile
				20					25					30
Lys	Leu	Tyr	Leu	Arg	Arg	Gln	Arg	Leu	Leu	Arg	Asp	Leu	Arg	Pro
				35					40					45
Phe	Pro	Ala	Pro	Pro	Thr	His	Trp	Phe	Leu	Gly	His	Gln	Lys	Phe
				50					55					60
Ile	Gln	Asp	Asp	Asn	Met	Glu	Lys	Leu	Glu	Glu	Ile	Ile	Glu	Lys
				65					70					75
Tyr	Pro	Arg	Ala	Phe	Pro	Phe	Trp	Ile	Gly	Pro	Phe	Gln	Ala	Phe
				80					85					90
Phe	Cys	Ile	Tyr	Asp	Pro	Asp	Tyr	Ala	Lys	Thr	Leu	Leu	Ser	Arg
				95					100					105
Thr	Asp	Pro	Lys	Ser	Gln	Tyr	Leu	Gln	Lys	Phe	Ser	Pro	Pro	Leu
				110					115					120
Leu	Gly	Lys	Gly	Leu	Ala	Ala	Leu	Asp	Gly	Pro	Lys	Trp	Phe	Gln
				125					130					135
His	Arg	Arg	Leu	Leu	Thr	Pro	Gly	Phe	His	Phe	Asn	Ile	Leu	Lys
				140					145					150
Ala	Tyr	Ile	Glu	Val	Met	Ala	His	Ser	Val	Lys	Met	Met	Leu	Asp
				155					160					165
Lys	Trp	Glu	Lys	Ile	Cys	Ser	Thr	Gln	Asp	Thr	Ser	Val	Glu	Val
				170					175					180
Tyr	Glu	His	Ile	Asn	Ser	Met	Ser	Leu	Asp	Ile	Ile	Met	Lys	Cys
				185					190					195
Ala	Phe	Ser	Lys	Glu	Thr	Asn	Cys	Gln	Thr	Asn	Ser	Thr	His	Asp
				200					205					210
Pro	Tyr	Ala	Lys	Ala	Ile	Phe	Glu	Leu	Ser	Lys	Ile	Ile	Phe	His
				215					220					225
Arg	Leu	Tyr	Ser	Leu	Leu	Tyr	His	Ser	Asp	Ile	Ile	Phe	Lys	Leu
				230					235					240
Ser	Pro	Gln	Gly	Tyr	Arg	Phe	Gln	Lys	Leu	Ser	Arg	Val	Leu	Asn
				245					250					255
Gln	Tyr	Thr	Asp	Thr	Ile	Ile	Gln	Glu	Arg	Lys	Lys	Ser	Leu	Gln

	260		265		270
Ala Gly Val Lys	Gln Asp Asn Thr Pro	Lys Arg Lys Tyr Gln Asp			
	275	280			285
Phe Leu Asp Ile	Val Leu Ser Ala Lys	Asp Glu Ser Gly Ser Ser			
	290	295			300
Phe Ser Asp Ile	Asp Val His Ser Glu	Val Ser Thr Phe Leu Leu			
	305	310			315
Ala Gly His Asp	Thr Leu Ala Ala Ser	Ile Ser Trp Ile Leu Tyr			
	320	325			330
Cys Leu Ala Leu	Asn Pro Glu His Gln	Glu Arg Cys Arg Glu Glu			
	335	340			345
Val Arg Gly Ile	Leu Gly Asp Gly Ser	Ser Ile Thr Trp Asp Gln			
	350	355			360
Leu Gly Glu Met	Ser Tyr Thr Thr Met	Cys Ile Lys Glu Thr Cys			
	365	370			375
Arg Leu Ile Pro	Ala Val Pro Ser Ile	Ser Arg Asp Leu Ser Lys			
	380	385			390
Pro Leu Thr Phe	Pro Asp Gly Cys Thr	Leu Pro Ala Gly Ile Thr			
	395	400			405
Val Val Leu Ser	Ile Trp Gly Leu His	His Asn Pro Ala Val Trp			
	410	415			420
Lys Asn Pro Lys	Val Phe Asp Pro Leu	Arg Phe Ser Gln Glu Asn			
	425	430			435
Ser Asp Gln Arg	His Pro Tyr Ala Tyr	Leu Pro Phe Ser Ala Gly			
	440	445			450
Ser Arg Asn Cys	Ile Gly Gln Glu Phe	Ala Met Ile Glu Leu Lys			
	455	460			465
Val Thr Ile Ala	Leu Ile Leu Leu His	Phe Arg Val Thr Pro Asp			
	470	475			480
Pro Thr Arg Pro	Leu Thr Phe Pro Asn	His Phe Ile Leu Lys Pro			
	485	490			495
Lys Asn Gly Met	Tyr Leu His Leu Lys	Lys Leu Ser Glu Cys			
	500	505			

<210> 109

<211> 1113

<212> DNA

<213> Homo Sapien

<400> 109

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 tccagaagaa gccatgggaa cccctcgtat ccagcatttg ctgacccctc 200
 tggtcctagg agcctccctc ctgacctcgg gcctagagct gtattgtcaa 250
 aagggctctgt ccatgactgt ggaagcagat ccagccaata tgtttaactg 300
 gaccacagag gaagtggaga cttgtgacaa aggggcactt tgccaggaaa 350
 ccatactaata aattaaagca gggactgaga cagccatttt ggccacgaag 400
 ggctgcatcc cggaagggga ggaggccata acaattgtcc agcactcttc 450
 acctcccggc ctgatcgtga cctcctacag taactactgt gaggattcct 500
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 acagcttcca ctgtgtcaac aaccctccat tgtccaacct gtgtggcttt 600
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 aatcttagca gtaggacca tgtttgtgag ggaagcgtgc ccacatcagc 800
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 ttgactggga gccttcttac tgttgaggtt caacaagctg aggagtagat 1000
 ggggaatttga gggagaatac agagatacta tgaacgtatt tgacattttt 1050
 aatacaattt ctgctataat ttttgtatgc agtaggcgtt actaataaac 1100
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<210> 110
 <211> 249
 <212> PRT
 <213> Homo Sapien

<400> 110
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 Gly Ala Ser Leu Leu Thr Ser Gly Leu Glu Leu Tyr Cys Gln Lys
 20 25 30
 Gly Leu Ser Met Thr Val Glu Ala Asp Pro Ala Asn Met Phe Asn
 35 40 45

Trp	Thr	Thr	Glu	Glu	Val	Glu	Thr	Cys	Asp	Lys	Gly	Ala	Leu	Cys	
				50					55					60	
Gln	Glu	Thr	Ile	Leu	Ile	Ile	Lys	Ala	Gly	Thr	Glu	Thr	Ala	Ile	
				65					70					75	
Leu	Ala	Thr	Lys	Gly	Cys	Ile	Pro	Glu	Gly	Glu	Glu	Ala	Ile	Thr	
				80					85					90	
Ile	Val	Gln	His	Ser	Ser	Pro	Pro	Gly	Leu	Ile	Val	Thr	Ser	Tyr	
				95					100					105	
Ser	Asn	Tyr	Cys	Glu	Asp	Ser	Phe	Cys	Asn	Asp	Lys	Asp	Ser	Leu	
				110					115					120	
Ser	Gln	Phe	Trp	Glu	Phe	Ser	Glu	Thr	Thr	Ala	Ser	Thr	Val	Ser	
				125					130					135	
Thr	Thr	Leu	His	Cys	Pro	Thr	Cys	Val	Ala	Leu	Gly	Thr	Cys	Phe	
				140					145					150	
Ser	Ala	Pro	Ser	Leu	Pro	Cys	Pro	Asn	Gly	Thr	Thr	Arg	Cys	Tyr	
				155					160					165	
Gln	Gly	Lys	Leu	Glu	Ile	Thr	Gly	Gly	Gly	Ile	Glu	Ser	Ser	Val	
				170					175					180	
Glu	Val	Lys	Gly	Cys	Thr	Ala	Met	Ile	Gly	Cys	Arg	Leu	Met	Ser	
				185					190					195	
Gly	Ile	Leu	Ala	Val	Gly	Pro	Met	Phe	Val	Arg	Glu	Ala	Cys	Pro	
				200					205					210	
His	Gln	Leu	Leu	Thr	Gln	Pro	Arg	Lys	Thr	Glu	Asn	Gly	Ala	Thr	
				215					220					225	
Cys	Leu	Pro	Ile	Pro	Val	Trp	Gly	Leu	Gln	Leu	Leu	Leu	Pro	Leu	
				230					235					240	
Leu	Leu	Pro	Ser	Phe	Ile	His	Phe	Ser							
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<210> 111
 <211> 3162
 <212> DNA
 <213> Homo Sapien

<400> 111
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 agggaaagat aaacggagac ggaggaaagg tggcagccag attacttaga 200
 gaggcacaga ggagagagat cggggtgagt cgccatgggg actcccaggg 250

cccagcacc gccgcctccc cagctgctgt tcctaattct gctgagctgt 300
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<211> 910

<212> PRT

<213> Homo Sapien

<400> 112

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Phe	Leu	Ile	Leu	Leu	Ser	Cys	Pro	Trp	Ile	Gln	Gly	Leu	Pro	Leu	
				20					25					30	
Lys	Glu	Glu	Glu	Ile	Leu	Pro	Glu	Pro	Gly	Ser	Glu	Thr	Pro	Thr	
				35					40					45	
Val	Ala	Ser	Glu	Ala	Leu	Ala	Glu	Leu	Leu	His	Gly	Ala	Leu	Leu	
				50					55					60	
Arg	Arg	Gly	Pro	Glu	Met	Gly	Tyr	Leu	Pro	Gly	Ser	Asp	Pro	Asp	
				65					70					75	
Pro	Thr	Leu	Ala	Thr	Pro	Pro	Ala	Gly	Gln	Thr	Leu	Ala	Val	Pro	
				80					85					90	
Ser	Leu	Pro	Arg	Ala	Thr	Glu	Pro	Gly	Thr	Gly	Pro	Leu	Thr	Thr	
				95					100					105	
Ala	Val	Thr	Pro	Asn	Gly	Val	Arg	Gly	Ala	Gly	Pro	Thr	Ala	Pro	
				110					115					120	
Glu	Leu	Leu	Thr	Pro	Pro	Pro	Gly	Thr	Thr	Ala	Pro	Pro	Pro	Pro	
				125					130					135	
Ser	Pro	Ala	Ser	Pro	Gly	Pro	Pro	Leu	Gly	Pro	Glu	Gly	Gly	Glu	
				140					145					150	
Glu	Glu	Thr	Thr	Thr	Thr	Ile	Ile	Thr	Thr	Thr	Thr	Val	Thr	Thr	
				155					160					165	
Thr	Val	Thr	Ser	Pro	Val	Leu	Cys	Asn	Asn	Asn	Ile	Ser	Glu	Gly	
				170					175					180	
Glu	Gly	Tyr	Val	Glu	Ser	Pro	Asp	Leu	Gly	Ser	Pro	Val	Ser	Arg	
				185					190					195	
Thr	Leu	Gly	Leu	Leu	Asp	Cys	Thr	Tyr	Ser	Ile	His	Val	Tyr	Pro	
				200					205					210	
Gly	Tyr	Gly	Ile	Glu	Ile	Gln	Val	Gln	Thr	Leu	Asn	Leu	Ser	Gln	
				215					220					225	
Glu	Glu	Glu	Leu	Leu	Val	Leu	Ala	Gly	Gly	Gly	Ser	Pro	Gly	Leu	
				230					235					240	
Ala	Pro	Arg	Leu	Leu	Ala	Asn	Ser	Ser	Met	Leu	Gly	Glu	Gly	Gln	
				245					250					255	

Val	Leu	Arg	Ser	Pro	Thr	Asn	Arg	Leu	Leu	Leu	His	Phe	Gln	Ser	
				260					265					270	
Pro	Arg	Val	Pro	Arg	Gly	Gly	Gly	Phe	Arg	Ile	His	Tyr	Gln	Ala	
				275					280					285	
Tyr	Leu	Leu	Ser	Cys	Gly	Phe	Pro	Pro	Arg	Pro	Ala	His	Gly	Asp	
				290					295					300	
Val	Ser	Val	Thr	Asp	Leu	His	Pro	Gly	Gly	Thr	Ala	Thr	Phe	His	
				305					310					315	
Cys	Asp	Ser	Gly	Tyr	Gln	Leu	Gln	Gly	Glu	Glu	Thr	Leu	Ile	Cys	
				320					325					330	
Leu	Asn	Gly	Thr	Arg	Pro	Ser	Trp	Asn	Gly	Glu	Thr	Pro	Ser	Cys	
				335					340					345	
Met	Ala	Ser	Cys	Gly	Gly	Thr	Ile	His	Asn	Ala	Thr	Leu	Gly	Arg	
				350					355					360	
Ile	Val	Ser	Pro	Glu	Pro	Gly	Gly	Ala	Val	Gly	Pro	Asn	Leu	Thr	
				365					370					375	
Cys	Arg	Trp	Val	Ile	Glu	Ala	Ala	Glu	Gly	Arg	Arg	Leu	His	Leu	
				380					385					390	
His	Phe	Glu	Arg	Val	Ser	Leu	Asp	Glu	Asp	Asn	Asp	Arg	Leu	Met	
				395					400					405	
Val	Arg	Ser	Gly	Gly	Ser	Pro	Leu	Ser	Pro	Val	Ile	Tyr	Asp	Ser	
				410					415					420	
Asp	Met	Asp	Asp	Val	Pro	Glu	Arg	Gly	Leu	Ile	Ser	Asp	Ala	Gln	
				425					430					435	
Ser	Leu	Tyr	Val	Glu	Leu	Leu	Ser	Glu	Thr	Pro	Ala	Asn	Pro	Leu	
				440					445					450	
Leu	Leu	Ser	Leu	Arg	Phe	Glu	Ala	Phe	Glu	Glu	Asp	Arg	Cys	Phe	
				455					460					465	
Ala	Pro	Phe	Leu	Ala	His	Gly	Asn	Val	Thr	Thr	Thr	Asp	Pro	Glu	
				470					475					480	
Tyr	Arg	Pro	Gly	Ala	Leu	Ala	Thr	Phe	Ser	Cys	Leu	Pro	Gly	Tyr	
				485					490					495	
Ala	Leu	Glu	Pro	Pro	Gly	Pro	Pro	Asn	Ala	Ile	Glu	Cys	Val	Asp	
				500					505					510	
Pro	Thr	Glu	Pro	His	Trp	Asn	Asp	Thr	Glu	Pro	Ala	Cys	Lys	Ala	
				515					520					525	
Met	Cys	Gly	Gly	Glu	Leu	Ser	Glu	Pro	Ala	Gly	Val	Val	Leu	Ser	
				530					535					540	
Pro	Asp	Trp	Pro	Gln	Ser	Tyr	Ser	Pro	Gly	Gln	Asp	Cys	Val	Trp	

Glu	Gly	Gly	Asn	Leu	Ala	Leu	Ala	Ile	Leu	Leu	Pro	Leu	Gly	Leu
				845					850					855
Val	Ile	Val	Leu	Gly	Ser	Gly	Val	Tyr	Ile	Tyr	Tyr	Thr	Lys	Leu
				860					865					870
Gln	Gly	Lys	Ser	Leu	Phe	Gly	Phe	Ser	Gly	Ser	His	Ser	Tyr	Ser
				875					880					885
Pro	Ile	Thr	Val	Glu	Ser	Asp	Phe	Ser	Asn	Pro	Leu	Tyr	Glu	Ala
				890					895					900
Gly	Asp	Thr	Arg	Glu	Tyr	Glu	Val	Ser	Ile					
				905					910					

<210> 113
 <211> 3323
 <212> DNA
 <213> Homo Sapien

<400> 113
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 ccgtcgggggt gctcggggccg cgcgggagcc cactgtgggg ctccgggcatg 150
 gcgggcccga ggacctgagc tctcctcagg ggagcgggga ggcagctgct 200
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 agatcaacag ggagattcat gtggattaag tttagttctg atgaagagct 750
 tgaaggactg ggatttcgag caaatattc atttattcca gatccagact 800
 ttacttacct aggaggtatt ttaaatecca ttccagattg tcagttcgag 850
 ctctcgggag ctgatggaat agtgcgctct agtcaggtag aacaagagga 900
 gaaaacaaaa ccaggccaag ccgttgattg catctggacc attaaagcca 950

ctccaaaagc taagatttat ttgaggttcc tagattatca aatggagcac 1000
tcaaataaat gcaagagaaa ctctgttgca gtctatgatg gaagcagttc 1050
tattgaaaac ctgaaggcca agttttgcag cactgtggcc aatgatgtaa 1100
tgcttaaaac aggaattgga gtgattcgaa tgtgggcaga tgaaggtagt 1150
cggcttagca ggtttcgaat gctctttact tcctttgtgg agcctccctg 1200
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 aggttagatg ccagttaaaa ttccttagaa attggatgag ccttgagatt 2900
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 caataattta taaacataaa agctcattgt gttttttaga cttttgatat 3050
 tatttgatac tgtacaaact ttattaaatc aagatgaaag acctacagga 3100
 cagattcctt tcagtgttca catcagtggc tttgtatgca aatatgctgt 3150
 gttggacctg gacgctataa cttattgtaa agaccttga aatgtggaca 3200
 taagctcttt ctttcctttt gttactgtat ttagtttgtg ataaattttt 3250
 cactgtgtga tatttatgct ctaaatcact acacaaatcc catattaaaa 3300
 tatacattgt acctgaaaaa aaa 3323

<210> 114
 <211> 525
 <212> PRT
 <213> Homo Sapien

<400> 114
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 Thr Val Leu Val Val Glu Gly Ile Ala Val Ala Gln Lys Thr Gln
 20 25 30
 Asp Gly Gln Asn Ile Gly Ile Lys His Ile Pro Ala Thr Gln Cys
 35 40 45
 Gly Ile Trp Val Arg Thr Ser Asn Gly Gly His Phe Ala Ser Pro
 50 55 60
 Asn Tyr Pro Asp Ser Tyr Pro Pro Asn Lys Glu Cys Ile Tyr Ile
 65 70 75

Leu	Glu	Ala	Ala	Pro	Arg	Gln	Arg	Ile	Glu	Leu	Thr	Phe	Asp	Glu	80	85	90
His	Tyr	Tyr	Ile	Glu	Pro	Ser	Phe	Glu	Cys	Arg	Phe	Asp	His	Leu	95	100	105
Glu	Val	Arg	Asp	Gly	Pro	Phe	Gly	Phe	Ser	Pro	Leu	Ile	Asp	Arg	110	115	120
Tyr	Cys	Gly	Val	Lys	Ser	Pro	Pro	Leu	Ile	Arg	Ser	Thr	Gly	Arg	125	130	135
Phe	Met	Trp	Ile	Lys	Phe	Ser	Ser	Asp	Glu	Glu	Leu	Glu	Gly	Leu	140	145	150
Gly	Phe	Arg	Ala	Lys	Tyr	Ser	Phe	Ile	Pro	Asp	Pro	Asp	Phe	Thr	155	160	165
Tyr	Leu	Gly	Gly	Ile	Leu	Asn	Pro	Ile	Pro	Asp	Cys	Gln	Phe	Glu	170	175	180
Leu	Ser	Gly	Ala	Asp	Gly	Ile	Val	Arg	Ser	Ser	Gln	Val	Glu	Gln	185	190	195
Glu	Glu	Lys	Thr	Lys	Pro	Gly	Gln	Ala	Val	Asp	Cys	Ile	Trp	Thr	200	205	210
Ile	Lys	Ala	Thr	Pro	Lys	Ala	Lys	Ile	Tyr	Leu	Arg	Phe	Leu	Asp	215	220	225
Tyr	Gln	Met	Glu	His	Ser	Asn	Glu	Cys	Lys	Arg	Asn	Phe	Val	Ala	230	235	240
Val	Tyr	Asp	Gly	Ser	Ser	Ser	Ile	Glu	Asn	Leu	Lys	Ala	Lys	Phe	245	250	255
Cys	Ser	Thr	Val	Ala	Asn	Asp	Val	Met	Leu	Lys	Thr	Gly	Ile	Gly	260	265	270
Val	Ile	Arg	Met	Trp	Ala	Asp	Glu	Gly	Ser	Arg	Leu	Ser	Arg	Phe	275	280	285
Arg	Met	Leu	Phe	Thr	Ser	Phe	Val	Glu	Pro	Pro	Cys	Thr	Ser	Ser	290	295	300
Thr	Phe	Phe	Cys	His	Ser	Asn	Met	Cys	Ile	Asn	Asn	Ser	Leu	Val	305	310	315
Cys	Asn	Gly	Val	Gln	Asn	Cys	Ala	Tyr	Pro	Trp	Asp	Glu	Asn	His	320	325	330
Cys	Lys	Glu	Lys	Lys	Lys	Ala	Gly	Val	Phe	Glu	Gln	Ile	Thr	Lys	335	340	345
Thr	His	Gly	Thr	Ile	Ile	Gly	Ile	Thr	Ser	Gly	Ile	Val	Leu	Val	350	355	360
Leu	Leu	Ile	Ile	Ser	Ile	Leu	Val	Gln	Val	Lys	Gln	Pro	Arg	Lys			

	365		370		375
Lys Val Met Ala Cys Lys Thr Ala Phe Asn Lys Thr Gly Phe Gln	380		385		390
Glu Val Phe Asp Pro Pro His Tyr Glu Leu Phe Ser Leu Arg Asp	395		400		405
Lys Glu Ile Ser Ala Asp Leu Ala Asp Leu Ser Glu Glu Leu Asp	410		415		420
Asn Tyr Gln Lys Met Arg Arg Ser Ser Thr Ala Ser Arg Cys Ile	425		430		435
His Asp His His Cys Gly Ser Gln Ala Ser Ser Val Lys Gln Ser	440		445		450
Arg Thr Asn Leu Ser Ser Met Glu Leu Pro Phe Arg Asn Asp Phe	455		460		465
Ala Gln Pro Gln Pro Met Lys Thr Phe Asn Ser Thr Phe Lys Lys	470		475		480
Ser Ser Tyr Thr Phe Lys Gln Gly His Glu Cys Pro Glu Gln Ala	485		490		495
Leu Glu Asp Arg Val Met Glu Glu Ile Pro Cys Glu Ile Tyr Val	500		505		510
Arg Gly Arg Glu Asp Ser Ala Gln Ala Ser Ile Ser Ile Asp Phe	515		520		525

<210> 115
 <211> 2314
 <212> DNA
 <213> Homo Sapien

<400> 115
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 tctcctcgcc ctcctcactg agcttggaag actgcaagcc cacgaagggtt 100
 ctgaaggaat atttctgcat gtcacagtcc cacggaagat taagtcaaat 150
 gacagtgaag tttcagagag gaagatgatt tacatcatta caattgatgg 200
 acaacottac actctacatc tcggaaaaca atcattctta cccagaact 250
 ttttggttta tacatataat gaaactggat ctttgcattc tgtgtctcca 300
 tattttatga tgcattgccca ttaccaagga tatgctgccg aatttccaaa 350
 ttcatttgtg aactcagta tatgttctgg tctcagggga tttctccagt 400
 ttgaaaatat cagttatgga attgaaccag tagaatcttc agcaagattt 450
 gagcatataa tttatcaaata gaaaaataat gatccaaatg tatccatttt 500

agcagtaa at tacagtcata tttggcagaa agaccagccc tacaaagttc 550
 ctttaaactc acagataaaa aatctttcaa aactattacc ccaatatctg 600
 gaaatataca ttatagtggg aaaagctttg atgtttaccc agttcaaatt 650
 gactgttata ctgtcttcct tggaattgtg gtcaa atgaa aaccagattt 700
 ccaccagtgg ggatgctgat gatataattac aaagattttt ggcatggaaa 750
 cgggactatc tcacccctacg gcccacatgac atagcatact tacttgttta 800
 caggaaacat cctaaatatg tgggagcaac atttcctggc accgtatgca 850
 ataaaagcta tgatgcaggt attgctatgt atccagatgc aatagggtttg 900
 gagggatttt cggttattat agctcaactg cttggcctta atgtaggatt 950
 aacatatgat gacatcactc agtgtttctg tctgagagct acatgcatca 1000
 tgaatcatga agcagtgagt gccagtggta gaaagatttt tagcaactgc 1050
 agcatgcacg actatagata ttttgtttca aaatttgaga ctaa atgcct 1100
 tcagaagctt tcaaatttgc aaccattaca tcaaa atcaa ccagtgtgtg 1150
 gtaatgggat tttggaatcc aatgaagaat gtgactgtgg taataaaaat 1200
 gaatgtcaat ttaagaagtg ctgtgattat aacacatgta aactgaaggg 1250
 ctcagtaaaa tgtggttctg gaccatgttg tacatcaaag tgtgagttgt 1300
 caatagcagg cactccatgt agaaagagta ttgatccaga gtgtgatttt 1350
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 aatgtcaaac tactgataac cagtgtgcca agatatttgg aaaagggtgct 1500
 caagggtgctc catttgctg ttttaaagaa gttaattctc tgc atgaaag 1550
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 caaaaaatgc aaagggaag ggatatgtaa taattttggg aattgtcaat 1900
 gcttcctggg acatagacct ccagattgta aattccagtt tgggtcccca 1950

ggggtagta ttgatgatgg aaattttcag aaatctggtg acttttatac 2000
 tgaaaaaggc tacaatacac actggaacaa ctgggtttatt ctgagtttct 2050
 gcatttttct gccgtttttc atagttttca ccactgtgat ctttaaaaga 2100
 aatgaaataa gtaaatacatg taacagagag aatgcagagt ataatcgtaa 2150
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 aacttccata gcaaataacc taaaggaacg aatgtgcttt atttataacc 2250
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 ctgcgtgccc tccc 2314

<210> 116
 <211> 715
 <212> PRT
 <213> Homo Sapien

<400> 116
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 Ala His Glu Gly Ser Glu Gly Ile Phe Leu His Val Thr Val Pro
 20 25 30
 Arg Lys Ile Lys Ser Asn Asp Ser Glu Val Ser Glu Arg Lys Met
 35 40 45
 Ile Tyr Ile Ile Thr Ile Asp Gly Gln Pro Tyr Thr Leu His Leu
 50 55 60
 Gly Lys Gln Ser Phe Leu Pro Gln Asn Phe Leu Val Tyr Thr Tyr
 65 70 75
 Asn Glu Thr Gly Ser Leu His Ser Val Ser Pro Tyr Phe Met Met
 80 85 90
 His Cys His Tyr Gln Gly Tyr Ala Ala Glu Phe Pro Asn Ser Phe
 95 100 105
 Val Thr Leu Ser Ile Cys Ser Gly Leu Arg Gly Phe Leu Gln Phe
 110 115 120
 Glu Asn Ile Ser Tyr Gly Ile Glu Pro Val Glu Ser Ser Ala Arg
 125 130 135
 Phe Glu His Ile Ile Tyr Gln Met Lys Asn Asn Asp Pro Asn Val
 140 145 150
 Ser Ile Leu Ala Val Asn Tyr Ser His Ile Trp Gln Lys Asp Gln
 155 160 165
 Pro Tyr Lys Val Pro Leu Asn Ser Gln Ile Lys Asn Leu Ser Lys
 170 175 180

Leu	Leu	Pro	Gln	Tyr	Leu	Glu	Ile	Tyr	Ile	Ile	Val	Glu	Lys	Ala	
				185					190					195	
Leu	Met	Phe	Thr	Gln	Phe	Lys	Leu	Thr	Val	Ile	Leu	Ser	Ser	Leu	
				200					205					210	
Glu	Leu	Trp	Ser	Asn	Glu	Asn	Gln	Ile	Ser	Thr	Ser	Gly	Asp	Ala	
				215					220					225	
Asp	Asp	Ile	Leu	Gln	Arg	Phe	Leu	Ala	Trp	Lys	Arg	Asp	Tyr	Leu	
				230					235					240	
Ile	Leu	Arg	Pro	His	Asp	Ile	Ala	Tyr	Leu	Leu	Val	Tyr	Arg	Lys	
				245					250					255	
His	Pro	Lys	Tyr	Val	Gly	Ala	Thr	Phe	Pro	Gly	Thr	Val	Cys	Asn	
				260					265					270	
Lys	Ser	Tyr	Asp	Ala	Gly	Ile	Ala	Met	Tyr	Pro	Asp	Ala	Ile	Gly	
				275					280					285	
Leu	Glu	Gly	Phe	Ser	Val	Ile	Ile	Ala	Gln	Leu	Leu	Gly	Leu	Asn	
				290					295					300	
Val	Gly	Leu	Thr	Tyr	Asp	Asp	Ile	Thr	Gln	Cys	Phe	Cys	Leu	Arg	
				305					310					315	
Ala	Thr	Cys	Ile	Met	Asn	His	Glu	Ala	Val	Ser	Ala	Ser	Gly	Arg	
				320					325					330	
Lys	Ile	Phe	Ser	Asn	Cys	Ser	Met	His	Asp	Tyr	Arg	Tyr	Phe	Val	
				335					340					345	
Ser	Lys	Phe	Glu	Thr	Lys	Cys	Leu	Gln	Lys	Leu	Ser	Asn	Leu	Gln	
				350					355					360	
Pro	Leu	His	Gln	Asn	Gln	Pro	Val	Cys	Gly	Asn	Gly	Ile	Leu	Glu	
				365					370					375	
Ser	Asn	Glu	Glu	Cys	Asp	Cys	Gly	Asn	Lys	Asn	Glu	Cys	Gln	Phe	
				380					385					390	
Lys	Lys	Cys	Cys	Asp	Tyr	Asn	Thr	Cys	Lys	Leu	Lys	Gly	Ser	Val	
				395					400					405	
Lys	Cys	Gly	Ser	Gly	Pro	Cys	Cys	Thr	Ser	Lys	Cys	Glu	Leu	Ser	
				410					415					420	
Ile	Ala	Gly	Thr	Pro	Cys	Arg	Lys	Ser	Ile	Asp	Pro	Glu	Cys	Asp	
				425					430					435	
Phe	Thr	Glu	Tyr	Cys	Asn	Gly	Thr	Ser	Ser	Asn	Cys	Val	Pro	Asp	
				440					445					450	
Thr	Tyr	Ala	Leu	Asn	Gly	Arg	Leu	Cys	Lys	Leu	Gly	Thr	Ala	Tyr	
				455					460					465	
Cys	Tyr	Asn	Gly	Gln	Cys	Gln	Thr	Thr	Asp	Asn	Gln	Cys	Ala	Lys	

	470		475		480
Ile Phe Gly Lys	Gly 485	Ala Gln Gly Ala	Pro 490	Phe Ala Cys Phe	Lys 495
Glu Val Asn Ser	Leu 500	His Glu Arg Ser	Glu 505	Asn Cys Gly Phe	Lys 510
Asn Ser Gln Pro	Leu 515	Pro Cys Glu Arg	Lys 520	Asp Val Leu Cys	Gly 525
Lys Leu Ala Cys	Val 530	Gln Pro His Lys	Asn 535	Ala Asn Lys Ser	Asp 540
Ala Gln Ser Thr	Val 545	Tyr Ser Tyr Ile	Gln 550	Asp His Val Cys	Val 555
Ser Ile Ala Thr	Gly 560	Ser Ser Met Arg	Ser 565	Asp Gly Thr Asp	Asn 570
Ala Tyr Val Ala	Asp 575	Gly Thr Met Cys	Gly 580	Pro Glu Met Tyr	Cys 585
Val Asn Lys Thr	Cys 590	Arg Lys Val His	Leu 595	Met Gly Tyr Asn	Cys 600
Asn Ala Thr Thr	Lys 605	Cys Lys Gly Lys	Gly 610	Ile Cys Asn Asn	Phe 615
Gly Asn Cys Gln	Cys 620	Phe Pro Gly His	Arg 625	Pro Pro Asp Cys	Lys 630
Phe Gln Phe Gly	Ser 635	Pro Gly Gly Ser	Ile 640	Asp Asp Gly Asn	Phe 645
Gln Lys Ser Gly	Asp 650	Phe Tyr Thr Glu	Lys 655	Gly Tyr Asn Thr	His 660
Trp Asn Asn Trp	Phe 665	Ile Leu Ser Phe	Cys 670	Ile Phe Leu Pro	Phe 675
Phe Ile Val Phe	Thr 680	Thr Val Ile Phe	Lys 685	Arg Asn Glu Ile	Ser 690
Lys Ser Cys Asn	Arg 695	Glu Asn Ala Glu	Tyr 700	Asn Arg Asn Ser	Ser 705
Val Val Ser Glu	Ser 710	Asp Asp Val Gly	His 715		

<210> 117
 <211> 1422
 <212> DNA
 <213> Homo Sapien

<400> 117
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agggagtgtg gcgggcggct ccgggagcca acatgcctcg gtatgcgcag 100
 ctggtcatgg gccccgcggg cagcgggaag agcacctact gtgccaccat 150
 ggtccagcac tgtgaagccc tcaaccggtc tgtccaagtt gtaaacctgg 200
 atccagcagc agaacacttc aactactccg tgatggctga catccgggaa 250
 ctgatcgagg tggatgatgt aatggaggat gattctctgc gattcgggtcc 300
 caacggagga ttggtatttt gcatggagta ctttgccaat aattttgact 350
 ggctggagaa ctgtcttggc catgtagagg acgactatat cctttttgat 400
 tgtccaggtc agattgagtt gtacactcac ctgcctgtga tgaaacatct 450
 ggtccagcag ctcgagcagt gggagttccg agtctgtgga gtttttcttg 500
 ttgattctca gttcatgggt gagtcattca agtttatttc tggcatcttg 550
 gcagccctga gtgccatgat ctctctagaa attccgcaag tcaacatcat 600
 gacaaaaatg gatctgctga gtaaaaaagc aaaaaaggaa attgagaaat 650
 ttttagatcc agacatgtat tctttattag aagattctac aagtgactta 700
 agaagcaaaa aattcaagaa actgactaaa gctatatgtg gactgattga 750
 tgactacagc atggttcgat ttttacctta cgatcagtc gatgaagaaa 800
 gcatgaacat tgtattgcag catattgatt ttgccattca atatggagaa 850
 gacctagaat ttaaagaacc aaaggaacgt gaagatgagt cttcctctat 900
 gtttgacgaa tattttcaag aatgccagga tgaatgaaga gtttactaaa 950
 agtaaccatc taaagagctt gtggccaaac cagcagaaca ttcttctctt 1000
 caaaggatgc aatagtagaa agctacttat tttaatgaaa aaaagtaaaa 1050
 cttcgttctt tatcagctc atgcctgaat caaattttta attattctga 1100
 aactgctgct gtttaaagtg gaatctttta gtattataac agcatcactt 1150
 tagattttgt aagtcaaaat tgaaatgaat gcacatagat ttatatataa 1200
 attagcacct gagctaaggt taaggccggc ctaaacttat tttcactttt 1250
 tgtattatth ttgagatgca ggaattactg taacaaaata tgtatgtccg 1300
 aagggaaaaa gctgcaagga tatatataag accactgctt atctgtatct 1350
 tcccattttc ctatattgaa aatgtatatt atttatataa cttaaaaagt 1400
 aaaaataact atgttttgag at 1422

<210> 118

<211> 284

<212> PRT
<213> Homo Sapien

<400> 118

Met	Pro	Arg	Tyr	Ala	Gln	Leu	Val	Met	Gly	Pro	Ala	Gly	Ser	Gly	
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Lys	Ser	Thr	Tyr	Cys	Ala	Thr	Met	Val	Gln	His	Cys	Glu	Ala	Leu	
				20					25					30	
Asn	Arg	Ser	Val	Gln	Val	Val	Asn	Leu	Asp	Pro	Ala	Ala	Glu	His	
				35					40					45	
Phe	Asn	Tyr	Ser	Val	Met	Ala	Asp	Ile	Arg	Glu	Leu	Ile	Glu	Val	
				50					55					60	
Asp	Asp	Val	Met	Glu	Asp	Asp	Ser	Leu	Arg	Phe	Gly	Pro	Asn	Gly	
				65					70					75	
Gly	Leu	Val	Phe	Cys	Met	Glu	Tyr	Phe	Ala	Asn	Asn	Phe	Asp	Trp	
				80					85					90	
Leu	Glu	Asn	Cys	Leu	Gly	His	Val	Glu	Asp	Asp	Tyr	Ile	Leu	Phe	
				95					100					105	
Asp	Cys	Pro	Gly	Gln	Ile	Glu	Leu	Tyr	Thr	His	Leu	Pro	Val	Met	
				110					115					120	
Lys	His	Leu	Val	Gln	Gln	Leu	Glu	Gln	Trp	Glu	Phe	Arg	Val	Cys	
				125					130					135	
Gly	Val	Phe	Leu	Val	Asp	Ser	Gln	Phe	Met	Val	Glu	Ser	Phe	Lys	
				140					145					150	
Phe	Ile	Ser	Gly	Ile	Leu	Ala	Ala	Leu	Ser	Ala	Met	Ile	Ser	Leu	
				155					160					165	
Glu	Ile	Pro	Gln	Val	Asn	Ile	Met	Thr	Lys	Met	Asp	Leu	Leu	Ser	
				170					175					180	
Lys	Lys	Ala	Lys	Lys	Glu	Ile	Glu	Lys	Phe	Leu	Asp	Pro	Asp	Met	
				185					190					195	
Tyr	Ser	Leu	Leu	Glu	Asp	Ser	Thr	Ser	Asp	Leu	Arg	Ser	Lys	Lys	
				200					205					210	
Phe	Lys	Lys	Leu	Thr	Lys	Ala	Ile	Cys	Gly	Leu	Ile	Asp	Asp	Tyr	
				215					220					225	
Ser	Met	Val	Arg	Phe	Leu	Pro	Tyr	Asp	Gln	Ser	Asp	Glu	Glu	Ser	
				230					235					240	
Met	Asn	Ile	Val	Leu	Gln	His	Ile	Asp	Phe	Ala	Ile	Gln	Tyr	Gly	
				245					250					255	
Glu	Asp	Leu	Glu	Phe	Lys	Glu	Pro	Lys	Glu	Arg	Glu	Asp	Glu	Ser	
				260					265					270	

Ser Ser Met Phe Asp Glu Tyr Phe Gln Glu Cys Gln Asp Glu
275 280

<210> 119
<211> 2868
<212> DNA
<213> Homo Sapien

<400> 119
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<210> 120

<211> 775

<212> PRT

<213> Homo Sapien

<400> 120

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				20					25					30
Ala	Ser	Leu	Pro	Pro	Gly	Phe	Pro	Leu	Gly	Ala	Ala	Arg	Ser	Val
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Thr	Gly	Ala	Arg	Ser	Gly	Leu	Pro	Arg	Trp	Asn	Arg	Arg	Glu	Val
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Cys	Leu	Leu	Ser	Gly	Leu	Val	Phe	Ala	Ala	Gly	Leu	Cys	Ala	Ile
				65					70					75
Leu	Ala	Ala	Met	Leu	Ala	Leu	Lys	Tyr	Leu	Gly	Pro	Val	Ala	Ala
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Gly	Gly	Gly	Ala	Cys	Pro	Glu	Gly	Cys	Pro	Glu	Arg	Lys	Ala	Phe
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Ala	Arg	Ala	Ala	Arg	Phe	Leu	Ala	Ala	Asn	Leu	Asp	Ala	Ser	Ile
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Asp	Pro	Cys	Gln	Asp	Phe	Tyr	Ser	Phe	Ala	Cys	Gly	Gly	Trp	Leu
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Arg	Arg	His	Ala	Ile	Pro	Asp	Asp	Lys	Leu	Thr	Tyr	Gly	Thr	Ile
				140					145					150
Ala	Ala	Ile	Gly	Glu	Gln	Asn	Glu	Glu	Arg	Leu	Arg	Arg	Leu	Leu
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Ala	Arg	Pro	Gly	Gly	Gly	Pro	Gly	Gly	Ala	Ala	Gln	Arg	Lys	Val
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Arg	Ala	Phe	Phe	Arg	Ser	Cys	Leu	Asp	Met	Arg	Glu	Ile	Glu	Arg
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Leu	Gly	Pro	Arg	Pro	Met	Leu	Glu	Val	Ile	Glu	Asp	Cys	Gly	Gly
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Trp	Asp	Leu	Gly	Gly	Ala	Glu	Glu	Arg	Pro	Gly	Val	Ala	Ala	Arg
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Trp	Asp	Leu	Asn	Arg	Leu	Leu	Tyr	Lys	Ala	Gln	Gly	Val	Tyr	Ser	
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Ala	Ala	Ala	Leu	Phe	Ser	Leu	Thr	Val	Ser	Leu	Asp	Asp	Arg	Asn	
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Ser	Ser	Arg	Tyr	Val	Ile	Arg	Ile	Asp	Gln	Asp	Gly	Leu	Thr	Leu	
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Pro	Glu	Arg	Thr	Leu	Tyr	Leu	Ala	Gln	Asp	Glu	Asp	Ser	Glu	Lys	
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Val	Val	Val	Leu	Ser	Glu	His	Leu	Ser	Pro	Pro	Phe	Arg	Glu	Ala	
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Leu	His	Glu	Leu	Ala	Gln	Glu	Met	Glu	Gly	Ser	Asp	Lys	Pro	Gln	
				425					430					435	
Glu	Leu	Ala	Arg	Val	Cys	Leu	Gly	Gln	Ala	Asn	Arg	His	Phe	Gly	
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Met	Ala	Leu	Gly	Ala	Leu	Phe	Val	His	Glu	His	Phe	Ser	Ala	Ala	
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Ser	Lys	Ala	Lys	Val	Gln	Gln	Leu	Val	Glu	Asp	Ile	Lys	Tyr	Ile	
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Arg	Ala	Ala	Ala	Arg	Ala	Lys	Leu	Gln	Tyr	Met	Met	Val	Met	Val	
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Gln	Glu	Val	Asp	Lys	Ser	Thr	Trp	Leu	Leu	Pro	Pro	Gln	Ala	Leu	
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Asn	Ala	Tyr	Tyr	Leu	Pro	Asn	Lys	Asn	Gln	Met	Val	Phe	Pro	Ala	
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				620					625					630	
Leu	Leu	His	Trp	Trp	Thr	Glu	Ala	Ser	Tyr	Ser	Arg	Phe	Leu	Arg	
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Lys	Ala	Glu	Cys	Ile	Val	Arg	Leu	Tyr	Asp	Asn	Phe	Thr	Val	Tyr	
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Asp	Met	Gly	Val	Leu	Lys	Leu	Ala	Tyr	His	Ala	Tyr	Gln	Lys	Trp	
				680					685					690	
Val	Arg	Glu	His	Gly	Pro	Glu	His	Pro	Leu	Pro	Arg	Leu	Lys	Tyr	
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Thr	His	Asp	Gln	Leu	Phe	Phe	Ile	Ala	Phe	Ala	Gln	Asn	Trp	Cys	
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Ile	Lys	Arg	Arg	Ser	Gln	Ser	Ile	Tyr	Leu	Gln	Val	Leu	Thr	Asp	
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Lys	His	Ala	Pro	Glu	His	Tyr	Arg	Val	Leu	Gly	Ser	Val	Ser	Gln	
				740					745					750	
Phe	Glu	Glu	Phe	Gly	Arg	Ala	Phe	His	Cys	Pro	Lys	Asp	Ser	Pro	
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 <212> DNA
 <213> Homo Sapien

<400> 121

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<210> 122

<211> 511

<212> PRT

<213> Homo Sapien

<400> 122

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Arg	Leu	Cys	Gly	His	Ser	Ala	Phe	Pro	His	Leu	Arg	Val	Leu	Glu	35	40	45	
Ala	Thr	Ala	Arg	Ala	Gly	Gly	Arg	Ile	Arg	Ser	Glu	Arg	Cys	Phe	50	55	60	
Gly	Gly	Val	Val	Glu	Val	Gly	Ala	His	Trp	Ile	His	Gly	Pro	Ser	65	70	75	
Arg	Gly	Asn	Pro	Val	Phe	Gln	Leu	Ala	Ala	Glu	Tyr	Gly	Leu	Leu	80	85	90	
Gly	Glu	Lys	Glu	Leu	Ser	Gln	Glu	Asn	Gln	Leu	Val	Glu	Thr	Gly	95	100	105	
Gly	His	Val	Gly	Leu	Pro	Ser	Val	Ser	Tyr	Ala	Ser	Ser	Gly	Ala	110	115	120	
Ser	Val	Ser	Leu	Gln	Leu	Val	Ala	Glu	Met	Ala	Thr	Leu	Phe	Tyr	125	130	135	
Gly	Leu	Ile	Asp	Gln	Thr	Arg	Glu	Phe	Leu	His	Ala	Ala	Glu	Thr	140	145	150	
Pro	Val	Pro	Ser	Val	Gly	Glu	Tyr	Leu	Lys	Lys	Glu	Ile	Gly	Gln	155	160	165	
His	Val	Ala	Gly	Trp	Thr	Glu	Asp	Glu	Glu	Thr	Arg	Lys	Leu	Lys	170	175	180	

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Tyr	Thr	Val	Leu	Pro	Gly	Leu	Asp	Cys	Thr	Phe	Ser	Lys	Gly	Tyr
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Gln	Gly	Leu	Thr	Asn	Cys	Met	Met	Ala	Ala	Leu	Pro	Glu	Asp	Thr
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Val	Val	Phe	Glu	Lys	Pro	Val	Lys	Thr	Ile	His	Trp	Asn	Gly	Ser
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Phe	Trp	Glu	Pro	Asp	Cys	Gln	Leu	Ile	Gln	Leu	Val	Trp	Glu	Asp
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Phe	Arg	Lys	Leu	Ile	Gly	Phe	Val	Val	Leu	Pro	Ala	Phe	Ala	Ser
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Val	Leu	Arg	Arg	Val	Thr	Gly	Asn	Pro	Arg	Leu	Pro	Ala	Pro	Lys
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Ser	Val	Leu	Arg	Ser	Arg	Trp	His	Ser	Ala	Pro	Tyr	Thr	Arg	Gly
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Ser	Tyr	Ser	Tyr	Val	Ala	Val	Gly	Ser	Thr	Gly	Gly	Asp	Leu	Asp
				440					445					450
Leu	Leu	Ala	Gln	Pro	Leu	Pro	Ala	Asp	Gly	Ala	Gly	Ala	Gln	Leu
				455					460					465
Gln	Ile	Leu	Phe	Ala	Gly	Glu	Ala	Thr	His	Arg	Thr	Phe	Tyr	Ser

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Thr Thr His Gly Ala Leu Leu Ser Gly Trp Arg Glu Ala Asp Arg					
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Leu

<210> 123
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 <212> DNA
 <213> Homo Sapien

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<210> 126

<211> 451

<212> PRT

<213> Homo Sapien

<400> 126

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Phe	Lys	Val	Val	Val	Lys	Ser	Leu	Ser	Pro	Lys	Glu	Leu	Val	Arg
				20					25					30

Ile	His	Val	Pro	Lys	Pro	Leu	Asp	Arg	Asn	Asp	Gly	Thr	Phe	Leu	
				35					40					45	
Met	Arg	Tyr	Arg	Met	Tyr	Glu	Thr	Val	Asp	Glu	Gly	Leu	Lys	Ile	
				50					55					60	
Glu	Val	Leu	Tyr	Gly	Asp	Glu	His	Val	Ala	Gln	Ser	Pro	Tyr	Ile	
				65					70					75	
Leu	Lys	Gly	Pro	Val	Tyr	His	Glu	Tyr	Cys	Glu	Cys	Pro	Glu	Asp	
				80					85					90	
Pro	Gln	Ala	Trp	Gln	Lys	Thr	Leu	Ser	Cys	Pro	Thr	Lys	Glu	Pro	
				95					100					105	
Gln	Ile	Ala	Lys	Asp	Phe	Ala	Ser	Phe	Pro	Ser	Ile	Asn	Leu	Gln	
				110					115					120	
Gln	Met	Leu	Lys	Glu	Val	Pro	Lys	Arg	Phe	Gly	Asp	Glu	Arg	Gly	
				125					130					135	
Ala	Ile	Val	His	Tyr	Thr	Ile	Leu	Asn	Asn	His	Val	Tyr	Arg	Arg	
				140					145					150	
Ser	Leu	Gly	Lys	Tyr	Thr	Asp	Phe	Lys	Met	Phe	Ser	Asp	Glu	Ile	
				155					160					165	
Leu	Leu	Ser	Leu	Thr	Arg	Lys	Val	Leu	Leu	Pro	Asp	Leu	Glu	Phe	
				170					175					180	
Tyr	Val	Asn	Leu	Gly	Asp	Trp	Pro	Leu	Glu	His	Arg	Lys	Val	Asn	
				185					190					195	
Gly	Thr	Pro	Ser	Pro	Ile	Pro	Ile	Ile	Ser	Trp	Cys	Gly	Ser	Leu	
				200					205					210	
Asp	Ser	Arg	Asp	Val	Val	Leu	Pro	Thr	Tyr	Asp	Ile	Thr	His	Ser	
				215					220					225	
Met	Leu	Glu	Ala	Met	Arg	Gly	Val	Thr	Asn	Asp	Leu	Leu	Ser	Ile	
				230					235					240	
Gln	Gly	Asn	Thr	Gly	Pro	Ser	Trp	Ile	Asn	Lys	Thr	Glu	Arg	Ala	
				245					250					255	
Phe	Phe	Arg	Gly	Arg	Asp	Ser	Arg	Glu	Glu	Arg	Leu	Gln	Leu	Val	
				260					265					270	
Gln	Leu	Ser	Lys	Glu	Asn	Pro	Gln	Leu	Leu	Asp	Ala	Gly	Ile	Thr	
				275					280					285	
Gly	Tyr	Phe	Phe	Phe	Gln	Glu	Lys	Glu	Lys	Glu	Leu	Gly	Lys	Ala	
				290					295					300	
Lys	Leu	Met	Gly	Phe	Phe	Asp	Phe	Phe	Lys	Tyr	Lys	Tyr	Gln	Val	
				305					310					315	
Asn	Val	Asp	Gly	Thr	Val	Ala	Ala	Tyr	Arg	Tyr	Pro	Tyr	Leu	Met	

	320		325		330
Leu Gly Asp Ser	Leu Val Leu Lys Gln	Asp Ser Pro Tyr Tyr	Glu		
	335		340		345
His Phe Tyr Met	Ala Leu Glu Pro Trp	Lys His Tyr Val Pro	Ile		
	350		355		360
Lys Arg Asn Leu	Ser Asp Leu Leu Glu	Lys Val Lys Trp Ala	Lys		
	365		370		375
Glu Asn Asp Glu	Glu Ala Lys Lys Ile	Ala Lys Glu Gly Gln	Leu		
	380		385		390
Met Ala Arg Asp	Leu Leu Gln Pro His	Arg Leu Tyr Cys Tyr	Tyr		
	395		400		405
Tyr Gln Val Leu	Gln Lys Tyr Ala Glu	Arg Gln Ser Ser Lys	Pro		
	410		415		420
Glu Val Arg Asp	Gly Met Glu Leu Val	Pro Gln Pro Glu Asp	Ser		
	425		430		435
Thr Ala Ile Cys	Gln Cys His Arg Lys	Lys Pro Ser Arg Glu	Glu		
	440		445		450

Leu

<210> 127
 <211> 2163
 <212> DNA
 <213> Homo Sapien

<400> 127
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 aggaatcatg aataaactgg aggataagca ggaccagatg ataccatgaa 200
 gagaagttta caggccctct attgccaact gttaagtttc ctgctgatct 250
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<210> 128
 <211> 575
 <212> PRT
 <213> Homo Sapien

<400> 128
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 Glu Pro Ser Pro Arg Glu Ser Leu Gln Val Leu Pro Ser Gly Thr
 35 40 45
 Pro Pro Gly Thr Met Val Thr Ala Pro His Ser Ser Thr Arg His
 50 55 60
 Thr Ser Val Val Met Leu Thr Pro Asn Pro Asp Gly Pro Pro Ser
 65 70 75
 Gln Ala Ala Ala Pro Met Ala Thr Leu Thr Pro Arg Ala Glu Gly
 80 85 90
 His Pro Pro Thr His Thr Ile Ser Thr Ile Ala Ala Thr Val Thr
 95 100 105
 Ala Pro Tyr Ser Glu Ser Ser Leu Ser Thr Gly Pro Ala Pro Ala
 110 115 120
 Ala Met Ala Thr Thr Ser Ser Lys Pro Glu Gly Arg Pro Arg Gly
 125 130 135
 Gln Ala Ala Pro Thr Ile Leu Leu Thr Lys Pro Pro Gly Ala Thr
 140 145 150
 Ser Arg Pro Thr Thr Ala Pro Pro Arg Thr Thr Thr Arg Arg Pro
 155 160 165
 Pro Arg Pro Pro Gly Ser Ser Arg Lys Gly Ala Gly Asn Ser Ser
 170 175 180
 Arg Pro Val Pro Pro Ala Pro Gly Gly His Ser Arg Ser Lys Glu
 185 190 195
 Gly Gln Arg Gly Arg Asn Pro Ser Ser Thr Pro Leu Gly Gln Lys
 200 205 210
 Arg Pro Leu Gly Lys Ile Phe Gln Ile Tyr Lys Gly Asn Phe Thr
 215 220 225
 Gly Ser Val Glu Pro Glu Pro Ser Thr Leu Thr Pro Arg Thr Pro

Arg	Glu	Ile	Gln	Ser	Leu	Glu	Thr	Ser	Glu	Asp	Gln	Leu	Ser	Glu
				530					535					540
Pro	Arg	Ser	Pro	Ala	Asn	Gly	Asp	Tyr	Arg	Asp	Thr	Gly	Met	Val
				545					550					555
Leu	Val	Asn	Pro	Phe	Cys	Gln	Glu	Thr	Leu	Phe	Val	Gly	Asn	Asp
				560					565					570
Gln	Val	Ser	Glu	Ile										
				575										

<210> 129
 <211> 2334
 <212> DNA
 <213> Homo Sapien

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 ctccagcctg ggcgacagag ccagattctg tctc 2334

<210> 130
 <211> 530
 <212> PRT
 <213> Homo Sapien

<400> 130

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Val	Leu	Ile	Ser	Gly	Cys	Trp	Gly	Gln	Val	Asn	Arg	Leu	Pro	Phe	
				20					25					30	
Phe	Thr	Asn	His	Phe	Phe	Asp	Thr	Tyr	Leu	Leu	Ile	Ser	Glu	Asp	
				35					40					45	
Thr	Pro	Val	Gly	Ser	Ser	Val	Thr	Gln	Leu	Leu	Ala	Gln	Asp	Met	
				50					55					60	
Asp	Asn	Asp	Pro	Leu	Val	Phe	Gly	Val	Ser	Gly	Glu	Glu	Ala	Ser	
				65					70					75	
Arg	Phe	Phe	Ala	Val	Glu	Pro	Asp	Thr	Gly	Val	Val	Trp	Leu	Arg	
				80					85					90	
Gln	Pro	Leu	Asp	Arg	Glu	Thr	Lys	Ser	Glu	Phe	Thr	Val	Glu	Phe	
				95					100					105	
Ser	Val	Ser	Asp	His	Gln	Gly	Val	Ile	Thr	Arg	Lys	Val	Asn	Ile	
				110					115					120	
Gln	Val	Gly	Asp	Val	Asn	Asp	Asn	Ala	Pro	Thr	Phe	His	Asn	Gln	
				125					130					135	
Pro	Tyr	Ser	Val	Arg	Ile	Pro	Glu	Asn	Thr	Pro	Val	Gly	Thr	Pro	
				140					145					150	
Ile	Phe	Ile	Val	Asn	Ala	Thr	Asp	Pro	Asp	Leu	Gly	Ala	Gly	Gly	
				155					160					165	
Ser	Val	Leu	Tyr	Ser	Phe	Gln	Pro	Pro	Ser	Gln	Phe	Phe	Ala	Ile	
				170					175					180	
Asp	Ser	Ala	Arg	Gly	Ile	Val	Thr	Val	Ile	Arg	Glu	Leu	Asp	Tyr	
				185					190					195	
Glu	Thr	Thr	Gln	Ala	Tyr	Gln	Leu	Thr	Val	Asn	Ala	Thr	Asp	Gln	
				200					205					210	
Asp	Lys	Thr	Arg	Pro	Leu	Ser	Thr	Leu	Ala	Asn	Leu	Ala	Ile	Ile	
				215					220					225	
Ile	Thr	Asp	Val	Gln	Asp	Met	Asp	Pro	Ile	Phe	Ile	Asn	Leu	Pro	
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Tyr	Ser	Thr	Asn	Ile	Tyr	Glu	His	Ser	Pro	Pro	Gly	Thr	Thr	Val	
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Arg	Ile	Ile	Thr	Ala	Ile	Asp	Gln	Asp	Lys	Gly	Arg	Pro	Arg	Gly	
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Ile	Gly	Tyr	Thr	Ile	Val	Ser	Gly	Asn	Thr	Asn	Ser	Ile	Phe	Ala	
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Leu	Asp	Tyr	Ile	Ser	Gly	Val	Leu	Thr	Leu	Asn	Gly	Leu	Leu	Asp	
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Arg	Glu	Asn	Pro	Leu	Tyr	Ser	His	Gly	Phe	Ile	Leu	Thr	Val	Lys	
				305					310					315	
Gly	Thr	Glu	Leu	Asn	Asp	Asp	Arg	Thr	Pro	Ser	Asp	Ala	Thr	Val	
				320					325					330	
Thr	Thr	Thr	Phe	Asn	Ile	Leu	Val	Ile	Asp	Ile	Asn	Asp	Asn	Ala	
				335					340					345	
Pro	Glu	Phe	Asn	Ser	Ser	Glu	Tyr	Ser	Val	Ala	Ile	Thr	Glu	Leu	
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Ala	Gln	Val	Gly	Phe	Ala	Leu	Pro	Leu	Phe	Ile	Gln	Val	Val	Asp	
				365					370					375	
Lys	Asp	Glu	Asn	Leu	Gly	Leu	Asn	Ser	Met	Phe	Glu	Val	Tyr	Leu	
				380					385					390	
Val	Gly	Asn	Asn	Ser	His	His	Phe	Ile	Ile	Ser	Pro	Thr	Ser	Val	
				395					400					405	
Gln	Gly	Lys	Ala	Asp	Ile	Arg	Ile	Arg	Val	Ala	Ile	Pro	Leu	Asp	
				410					415					420	
Tyr	Glu	Thr	Val	Asp	Arg	Tyr	Asp	Phe	Asp	Leu	Phe	Ala	Asn	Glu	
				425					430					435	
Ser	Val	Pro	Asp	His	Val	Gly	Tyr	Ala	Lys	Val	Lys	Ile	Thr	Leu	
				440					445					450	
Ile	Asn	Glu	Asn	Asp	Asn	Arg	Pro	Ile	Phe	Ser	Gln	Pro	Leu	Tyr	
				455					460					465	
Asn	Ile	Ser	Leu	Tyr	Glu	Asn	Val	Thr	Val	Gly	Thr	Ser	Val	Leu	
				470					475					480	
Thr	Val	Leu	Val	Ser	Pro	Arg	Phe	Thr	Ala	Gly	Pro	Leu	Ser	Ser	
				485					490					495	
Pro	Gly	Pro	Thr	Val	Val	Arg	His	Pro	Glu	Gly	Phe	Cys	Pro	Arg	
				500					505					510	
Asp	Leu	Ser	Asn	Gln	Gly	Arg	Arg	His	Pro	Gln	Ile	Pro	Glu	Leu	
				515					520					525	
Cys	Leu	Leu	Val	Tyr											
				530											

<210> 131

<211> 1840

<212> DNA

<213> Homo Sapien

<400> 131

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gaagccccctg cccctgcacc cgcccggccg cgagggcaca gcctggcgcg 150
ggaaagcccc caagcctggg ggccctgtccc tcagggctgg ggacgcggac 200
ttgcaagtgc ggcaggacgt ccggaacagg accctgcggg cgggtgtgcg 250
acagccaggc atgccccggg acccctggga cttgccggtg gggcagcggc 300
gcaccctgct gcgccacatc ctcgtaagt accgttaccg cttcctctac 350
tgctacgtcc ccaaggtggc ctgctctaac tggaaagcgg tgatgaaggt 400
gctggcaggc gtccctggaca gcgtggacgt ccgcctcaag atggaccacc 450
gcagtgaact ggtgttcctg gccgacctgc ggcctgagga gattcgctac 500
cgctgcagc actacttta gttcctgttt gtgcgggagc ccttggaacg 550
cctcctctct gcctaccgca acaagtttg cgagatccga gagtaccagc 600
aacgctatgg ggctgagata gtgaggcggg acagggctgg agcggggccc 650
agccctgcag gcgacgatgt cacattcccc gagttcctga gatacctggt 700
ggatgaggac cctgagcgca tgaatgagca ttggatgcc gtgtaccacc 750
tgtgccagcc ttgtgccgtg cactatgact ttgtgggctc ctatgagagg 800
ctggaggctg atgcaaatca ggtgctggag tgggtacggg caccacctca 850
cgtccgattt ccagctcgcc aggccctgga ccggccagcc agccccgaaa 900
gcctgcatta ccacttgtgc agtgcccccc gggccctgct gcaggatgtg 950
ctgcctaagt atatcctgga cttctccctc tttgcctacc cactgcctaa 1000
tgtcaccaag gaggcgtgtc agcagtgacc atgggtgtgg ggccagcagc 1050
tggtggggac tggtttcaac gccagcttcc tgtgcttctg cctgtcattc 1100
ggagaaactc tggctctggg gcttggggct tctcaggatc ctggatggca 1150
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catgaccaga gccagggacc ctgtggctct gatcccccat ttatccaccc 1450
catgtgcctc aggactagag tgagcaatca taccttataa atgacttttg 1500

tgcctttctg ctccagtctc aaaatttcct acacctgcca gttctttaca 1550
 tttttccaag gaaaggaaaa cggaagcagg gttcttgcct ggtagctcca 1600
 ggacccagct ctgcaggcac ccaaagaccc tctgtgcca gcctcttcct 1650
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 ttctaatag ctgacttttt aataaagcag ttttatatat 1840

<210> 132
 <211> 333
 <212> PRT
 <213> Homo Sapien

<400> 132

Met	Leu	Met	Phe	Ala	Val	Ile	Val	Ala	Ser	Ser	Gly	Leu	Leu	Leu	1	5	10	15
Met	Ile	Glu	Arg	Gly	Ile	Leu	Ala	Glu	Met	Lys	Pro	Leu	Pro	Leu	20	25	30	
His	Pro	Pro	Gly	Arg	Glu	Gly	Thr	Ala	Trp	Arg	Gly	Lys	Ala	Pro	35	40	45	
Lys	Pro	Gly	Gly	Leu	Ser	Leu	Arg	Ala	Gly	Asp	Ala	Asp	Leu	Gln	50	55	60	
Val	Arg	Gln	Asp	Val	Arg	Asn	Arg	Thr	Leu	Arg	Ala	Val	Cys	Gly	65	70	75	
Gln	Pro	Gly	Met	Pro	Arg	Asp	Pro	Trp	Asp	Leu	Pro	Val	Gly	Gln	80	85	90	
Arg	Arg	Thr	Leu	Leu	Arg	His	Ile	Leu	Val	Ser	Asp	Arg	Tyr	Arg	95	100	105	
Phe	Leu	Tyr	Cys	Tyr	Val	Pro	Lys	Val	Ala	Cys	Ser	Asn	Trp	Lys	110	115	120	
Arg	Val	Met	Lys	Val	Leu	Ala	Gly	Val	Leu	Asp	Ser	Val	Asp	Val	125	130	135	
Arg	Leu	Lys	Met	Asp	His	Arg	Ser	Asp	Leu	Val	Phe	Leu	Ala	Asp	140	145	150	
Leu	Arg	Pro	Glu	Glu	Ile	Arg	Tyr	Arg	Leu	Gln	His	Tyr	Phe	Lys	155	160	165	
Phe	Leu	Phe	Val	Arg	Glu	Pro	Leu	Glu	Arg	Leu	Leu	Ser	Ala	Tyr	170	175	180	
Arg	Asn	Lys	Phe	Gly	Glu	Ile	Arg	Glu	Tyr	Gln	Gln	Arg	Tyr	Gly	185	190	195	

Ala	Glu	Ile	Val	Arg	Arg	Tyr	Arg	Ala	Gly	Ala	Gly	Pro	Ser	Pro	
				200					205					210	
Ala	Gly	Asp	Asp	Val	Thr	Phe	Pro	Glu	Phe	Leu	Arg	Tyr	Leu	Val	
				215					220					225	
Asp	Glu	Asp	Pro	Glu	Arg	Met	Asn	Glu	His	Trp	Met	Pro	Val	Tyr	
				230					235					240	
His	Leu	Cys	Gln	Pro	Cys	Ala	Val	His	Tyr	Asp	Phe	Val	Gly	Ser	
				245					250					255	
Tyr	Glu	Arg	Leu	Glu	Ala	Asp	Ala	Asn	Gln	Val	Leu	Glu	Trp	Val	
				260					265					270	
Arg	Ala	Pro	Pro	His	Val	Arg	Phe	Pro	Ala	Arg	Gln	Ala	Trp	Tyr	
				275					280					285	
Arg	Pro	Ala	Ser	Pro	Glu	Ser	Leu	His	Tyr	His	Leu	Cys	Ser	Ala	
				290					295					300	
Pro	Arg	Ala	Leu	Leu	Gln	Asp	Val	Leu	Pro	Lys	Tyr	Ile	Leu	Asp	
				305					310					315	
Phe	Ser	Leu	Phe	Ala	Tyr	Pro	Leu	Pro	Asn	Val	Thr	Lys	Glu	Ala	
				320					325					330	

Cys Gln Gln

<210> 133
 <211> 1636
 <212> DNA
 <213> Homo Sapien

<400> 133
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 agtgctgttt ctggtattct catcgcggtc acctctaccg gtgtggacaa 100
 gtaaagtttg aatcagcttc tccatggcct gggcaccagt tcccggctga 150
 gccattttcc ttttggttaa aagtccccgc ccagaggcca attcgtcgcg 200
 gcggcggtgg agatcgaggg tcgctcaggc ttgcagatgg gtcaagggtt 250
 gtggagagtg gtcagaaacc agcagctgca acaagaaggc tacagtgagc 300
 aaggctacct caccagagag cagagcagga gaatggatgc gagcaacatt 350
 tctaacacca atcatcgtaa acaagtccaa ggaggcattg acatatatca 400
 tcttttgaag gcaaggaaat cgaaagaaca ggaaggattc attaatttgg 450
 aaatgttgcc tcctgagcta agctttacca tcttgtccta cctgaatgca 500
 actgaccttt gcttggcttc atgtgtttgg caggaccttg cgaatgatga 550

Gln	Val	Gln	Gly	Gly	Ile	Asp	Ile	Tyr	His	Leu	Leu	Lys	Ala	Arg	
				50					55					60	
Lys	Ser	Lys	Glu	Gln	Glu	Gly	Phe	Ile	Asn	Leu	Glu	Met	Leu	Pro	
				65					70					75	
Pro	Glu	Leu	Ser	Phe	Thr	Ile	Leu	Ser	Tyr	Leu	Asn	Ala	Thr	Asp	
				80					85					90	
Leu	Cys	Leu	Ala	Ser	Cys	Val	Trp	Gln	Asp	Leu	Ala	Asn	Asp	Glu	
				95					100					105	
Leu	Leu	Trp	Gln	Gly	Leu	Cys	Lys	Ser	Thr	Trp	Gly	His	Cys	Ser	
				110					115					120	
Ile	Tyr	Asn	Lys	Asn	Pro	Pro	Leu	Gly	Phe	Ser	Phe	Arg	Lys	Leu	
				125					130					135	
Tyr	Met	Gln	Leu	Asp	Glu	Gly	Ser	Leu	Thr	Phe	Asn	Ala	Asn	Pro	
				140					145					150	
Asp	Glu	Gly	Val	Asn	Tyr	Phe	Met	Ser	Lys	Gly	Ile	Leu	Asp	Asp	
				155					160					165	
Ser	Pro	Lys	Glu	Ile	Ala	Lys	Phe	Ile	Phe	Cys	Thr	Arg	Thr	Leu	
				170					175					180	
Asn	Trp	Lys	Lys	Leu	Arg	Ile	Tyr	Leu	Asp	Glu	Arg	Arg	Asp	Val	
				185					190					195	
Leu	Asp	Asp	Leu	Val	Thr	Leu	His	Asn	Phe	Arg	Asn	Gln	Phe	Leu	
				200					205					210	
Pro	Asn	Ala	Leu	Arg	Glu	Phe	Phe	Arg	His	Ile	His	Ala	Pro	Glu	
				215					220					225	
Glu	Arg	Gly	Glu	Tyr	Leu	Glu	Thr	Leu	Ile	Thr	Lys	Phe	Ser	His	
				230					235					240	
Arg	Phe	Cys	Ala	Cys	Asn	Pro	Asp	Leu	Met	Arg	Glu	Leu	Gly	Leu	
				245					250					255	
Ser	Pro	Asp	Ala	Val	Tyr	Val	Leu	Cys	Tyr	Ser	Leu	Ile	Leu	Leu	
				260					265					270	
Ser	Ile	Asp	Leu	Thr	Ser	Pro	His	Val	Lys	Asn	Lys	Met	Ser	Lys	
				275					280					285	
Arg	Glu	Phe	Ile	Arg	Asn	Thr	Arg	Arg	Ala	Ala	Gln	Asn	Ile	Ser	
				290					295					300	
Glu	Asp	Phe	Val	Gly	His	Leu	Tyr	Asp	Asn	Ile	Tyr	Leu	Ile	Gly	
				305					310					315	
His	Val	Ala	Ala												

<210> 135

<211> 1675
<212> DNA
<213> Homo Sapien

<400> 135

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gctgaggcca ccatctgctc tcttactggc caagggcgta aaaagatagt 100
cttcccatta gctagagagc aaaccccaga aagcctattg gctgcgccgt 150
ccgcgggcct tgggtccgctt tgaaggcggg ctgcggctgc gagaggaggg 200
cgggcgggag gctagctggt gtcgtggttg ctcgaggca cgtgtgcagt 250
cccggaagcg gcgaggggaa actgctccgc gcgcgccgcg ggaggaggaa 300
ccgcccggtc ctttagggtc cgggcccggc cgggccatgg attcaatgcc 350
tgagcccgcg tcccgtgctc ttctgcttct tcccttgctg ctgctgctgc 400
tgctgctgct gccggccccg gagctgggcc cgagccaggc cggagctgag 450
gagaacgact gggttcgcct gccagcaaa tgcgaagtgt gtaaatatgt 500
tgctgtggag ctgaagtcag cctttgagga aaccggcaag accaaggagg 550
tgattggcac gggctatggc atcctggacc agaaggcctc tggagtcaaa 600
tacaccaagt cggacttgcg gttaatcgaa gtcactgaga ccatttgcaa 650
gaggctcctg gattatagcc tgcacaagga gaggaccggc agcaatcgat 700
ttgccaaggg catgtcagag acctttgaga cttacacaa cctggtacac 750
aaaggggtca aggtggtgat ggacatcccc tatgagctgt ggaacgagac 800
ttctgcagag gtggctgacc tcaagaagca gtgtgatgtg ctggtggaag 850
agtttgagga ggtgatcgag gactggtaca ggaaccacca ggaggaagac 900
ctgactgaat tcctctgcgc caaccacgtg ctgaagggaa aagacaccag 950
ttgcctggca gagcagtggg ccggcaagaa gggagacaca gctgccctgg 1000
gaggggaagaa gtccaagaag aagagcagca gggccaaggc agcaggcggc 1050
aggagtagca gcagcaaaca aaggaaggag ctgggtggcc ttgagggaga 1100
ccccagcccc gaggaggatg agggcatcca gaaggcatcc cctctcacac 1150
acagcccccc tgatgagctc tgagcccacc cagcatcctc tgtcctgaga 1200
cccctgattt tgaagctgag gagtcagggg catggctctg gcaggccggg 1250
atggccccgc agccttcagc ccctccttgc cttggctgtg ccctcttctg 1300
ccaaggaaag acacaagccc caggaagaac tcagagccgt catgggtagc 1350

ccacgccgtc ctttcccctc cccaagtgtt tctctcctga cccagggttc 1400
aggcaggcct tgtgggtttca ggactgcaag gactccagtg tgaactcagg 1450
aggggacaggt gtcagaactg ggcaccagga ctggagcccc ctccggagac 1500
caaactcacc atccctcagt cctccccaac aggggtactag gactgcagcc 1550
ccctgtagct cctctctgct taccctcctt gtggacacct tgcactctgc 1600
ctggcccttc ccagagccca aagagtaaaa atgttctggt tctgatttct 1650
gaaaaaaaaa aaaaaaaaaa ttcct 1675

<210> 136
<211> 278
<212> PRT
<213> Homo Sapien

<400> 136
Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu
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Pro Leu Leu Leu Leu Leu Leu Leu Leu Leu Pro Ala Pro Glu Leu
20 25 30
Gly Pro Ser Gln Ala Gly Ala Glu Glu Asn Asp Trp Val Arg Leu
35 40 45
Pro Ser Lys Cys Glu Val Cys Lys Tyr Val Ala Val Glu Leu Lys
50 55 60
Ser Ala Phe Glu Glu Thr Gly Lys Thr Lys Glu Val Ile Gly Thr
65 70 75
Gly Tyr Gly Ile Leu Asp Gln Lys Ala Ser Gly Val Lys Tyr Thr
80 85 90
Lys Ser Asp Leu Arg Leu Ile Glu Val Thr Glu Thr Ile Cys Lys
95 100 105
Arg Leu Leu Asp Tyr Ser Leu His Lys Glu Arg Thr Gly Ser Asn
110 115 120
Arg Phe Ala Lys Gly Met Ser Glu Thr Phe Glu Thr Leu His Asn
125 130 135
Leu Val His Lys Gly Val Lys Val Val Met Asp Ile Pro Tyr Glu
140 145 150
Leu Trp Asn Glu Thr Ser Ala Glu Val Ala Asp Leu Lys Lys Gln
155 160 165
Cys Asp Val Leu Val Glu Glu Phe Glu Glu Val Ile Glu Asp Trp
170 175 180
Tyr Arg Asn His Gln Glu Glu Asp Leu Thr Glu Phe Leu Cys Ala
185 190 195

Asn	His	Val	Leu	Lys	Gly	Lys	Asp	Thr	Ser	Cys	Leu	Ala	Glu	Gln
			200						205					210
Trp	Ser	Gly	Lys	Lys	Gly	Asp	Thr	Ala	Ala	Leu	Gly	Gly	Lys	Lys
			215						220					225
Ser	Lys	Lys	Lys	Ser	Ser	Arg	Ala	Lys	Ala	Ala	Gly	Gly	Arg	Ser
			230						235					240
Ser	Ser	Ser	Lys	Gln	Arg	Lys	Glu	Leu	Gly	Gly	Leu	Glu	Gly	Asp
			245						250					255
Pro	Ser	Pro	Glu	Glu	Asp	Glu	Gly	Ile	Gln	Lys	Ala	Ser	Pro	Leu
			260						265					270
Thr	His	Ser	Pro	Pro	Asp	Glu	Leu							
			275											

<210> 137
 <211> 2207
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 2153, 2160
 <223> unknown base

<400> 137
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 aaactcatta gctccacagc aatgagtcct ccactgctga agcttggcgc 100
 tgtgcttagt accatggcaa tgatctcaaa ctggatgtcc caaactctcc 150
 catccttggg gggactgaac accacgaggg tgctcgactcc ggatacctta 200
 actcagatta gtcctaaaga aggggtggcag gtgtacagct cagctcagga 250
 tcctgatggg cggtgcattt gcacagttgt tgctccagaa caaaacctgt 300
 gttcccggga tgccaaaagc aggcaacttc gccaaactact ggaaaagggtt 350
 cagaacatgt ccagtcctat tgaagtctta aacttgagaa ctcagagaga 400
 tttccaatat gttttaaaaa tggaaaccca aatgaaaggg ctgaaggcaa 450
 aatttcggca gattgaagat gatcgaaaga cacttatgac caagcatttt 500
 caggagtga aagagaaaat ggacgagctc ctgcctttga tccccgtgct 550
 ggaacagtac aaaacagatg ctaagttaat caccagttc aaggaggaaa 600
 taaggaatct gtctgctgtc ctactggta ttcaggagga aattgggtgcc 650
 tatgactacg aggaactaca ccaaagagtg ctgagcttgg aaacaagact 700
 tcgtgactgc atgaaaaagc taacatgtgg caaactgatg aaaatcacag 750

gcccagttac agtcaagaca tctggaaccc gatttggtgc ttggatgaca 800
gacccttttag catctgagaa aaacaacaga gtctggtaca tggacagtta 850
tactaacaat aaaattgttc gtgaatacaa atcaattgca gactttgtca 900
gtggggctga atcaaggaca tacaaccttc ctttcaagtg ggcaggaact 950
aaccatgttg tctacaatgg ctactctat tttaacaagt atcagagtaa 1000
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ttctctgaca tcgacctaat ggctgatgaa atcgggctgt gggctgtgta 1150
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gcaggggaat ctttcatgat ctgtgggaca ctgtatgtca ccaactccca 1300
cttaactgga gccaggtgt attattccta ttccaccaa acctccacat 1350
atgagtacac agacattccc ttccataacc aatactttca catatccatg 1400
cttgactaca atgcaagaga tcgagctctc tatgcctgga acaatggcca 1450
ccaggtgctg ttcaatgtca cccttttcca tatcatcaag acagaggatg 1500
acacataggc aaatgtgaca tgttttcatt gatttaaaca gtgtgatttg 1550
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acatagctga gcttgtctaa ctaccatgt tggaaacaca tcttaacttc 1700
taaatttaca aggcctatca tgtccttgtc atgaaaagca ctaaaaaaaaa 1750
aaaagagttt aagtggctaa agtcatagtt ttgcaagaga ttaatgatct 1800
gccttatatt agagtcagag actaatggtg gcttaaattgc acgaatgtct 1850
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ctttaaaaaa tgtaaggatt tcatttatat tgaaaaataa tattaatcat 2000
tttgctgtta acacaattct ctgatgcggt gctgtacagt cattttttaa 2050
tctcttgcta acattttatt ggcagtatgt atttctacca ttgtaaccac 2100
cattgtgcta ttgtatctct tcacttctgt gaaagtaata ttttttataa 2150
aanacactgn aatttttaaaa aaaaaaaaaa aaaacaaaaa aaaaaaaaaa 2200

aaaaaaa 2207

<210> 138

<211> 478

<212> PRT

<213> Homo Sapien

<400> 138

Met	Ser	Pro	Pro	Leu	Leu	Lys	Leu	Gly	Ala	Val	Leu	Ser	Thr	Met
1				5					10					15

Ala	Met	Ile	Ser	Asn	Trp	Met	Ser	Gln	Thr	Leu	Pro	Ser	Leu	Val
				20					25					30

Gly	Leu	Asn	Thr	Thr	Arg	Leu	Ser	Thr	Pro	Asp	Thr	Leu	Thr	Gln
				35					40					45

Ile	Ser	Pro	Lys	Glu	Gly	Trp	Gln	Val	Tyr	Ser	Ser	Ala	Gln	Asp
				50					55					60

Pro	Asp	Gly	Arg	Cys	Ile	Cys	Thr	Val	Val	Ala	Pro	Glu	Gln	Asn
				65					70					75

Leu	Cys	Ser	Arg	Asp	Ala	Lys	Ser	Arg	Gln	Leu	Arg	Gln	Leu	Leu
				80					85					90

Glu	Lys	Val	Gln	Asn	Met	Ser	Gln	Ser	Ile	Glu	Val	Leu	Asn	Leu
				95					100					105

Arg	Thr	Gln	Arg	Asp	Phe	Gln	Tyr	Val	Leu	Lys	Met	Glu	Thr	Gln
				110					115					120

Met	Lys	Gly	Leu	Lys	Ala	Lys	Phe	Arg	Gln	Ile	Glu	Asp	Asp	Arg
				125					130					135

Lys	Thr	Leu	Met	Thr	Lys	His	Phe	Gln	Glu	Leu	Lys	Glu	Lys	Met
				140					145					150

Asp	Glu	Leu	Leu	Pro	Leu	Ile	Pro	Val	Leu	Glu	Gln	Tyr	Lys	Thr
				155					160					165

Asp	Ala	Lys	Leu	Ile	Thr	Gln	Phe	Lys	Glu	Glu	Ile	Arg	Asn	Leu
				170					175					180

Ser	Ala	Val	Leu	Thr	Gly	Ile	Gln	Glu	Glu	Ile	Gly	Ala	Tyr	Asp
				185					190					195

Tyr	Glu	Glu	Leu	His	Gln	Arg	Val	Leu	Ser	Leu	Glu	Thr	Arg	Leu
				200					205					210

Arg	Asp	Cys	Met	Lys	Lys	Leu	Thr	Cys	Gly	Lys	Leu	Met	Lys	Ile
				215					220					225

Thr	Gly	Pro	Val	Thr	Val	Lys	Thr	Ser	Gly	Thr	Arg	Phe	Gly	Ala
				230					235					240

Trp	Met	Thr	Asp	Pro	Leu	Ala	Ser	Glu	Lys	Asn	Asn	Arg	Val	Trp
				245					250					255

Tyr Met Asp Ser Tyr Thr Asn Asn Lys Ile Val Arg Glu Tyr Lys	260	265	270
Ser Ile Ala Asp Phe Val Ser Gly Ala Glu Ser Arg Thr Tyr Asn	275	280	285
Leu Pro Phe Lys Trp Ala Gly Thr Asn His Val Val Tyr Asn Gly	290	295	300
Ser Leu Tyr Phe Asn Lys Tyr Gln Ser Asn Ile Ile Ile Lys Tyr	305	310	315
Ser Phe Asp Met Gly Arg Val Leu Ala Gln Arg Ser Leu Glu Tyr	320	325	330
Ala Gly Phe His Asn Val Tyr Pro Tyr Thr Trp Gly Gly Phe Ser	335	340	345
Asp Ile Asp Leu Met Ala Asp Glu Ile Gly Leu Trp Ala Val Tyr	350	355	360
Ala Thr Asn Gln Asn Ala Gly Asn Ile Val Ile Ser Gln Leu Asn	365	370	375
Gln Asp Thr Leu Glu Val Met Lys Ser Trp Ser Thr Gly Tyr Pro	380	385	390
Lys Arg Ser Ala Gly Glu Ser Phe Met Ile Cys Gly Thr Leu Tyr	395	400	405
Val Thr Asn Ser His Leu Thr Gly Ala Lys Val Tyr Tyr Ser Tyr	410	415	420
Ser Thr Lys Thr Ser Thr Tyr Glu Tyr Thr Asp Ile Pro Phe His	425	430	435
Asn Gln Tyr Phe His Ile Ser Met Leu Asp Tyr Asn Ala Arg Asp	440	445	450
Arg Ala Leu Tyr Ala Trp Asn Asn Gly His Gln Val Leu Phe Asn	455	460	465
Val Thr Leu Phe His Ile Ile Lys Thr Glu Asp Asp Thr	470	475	

<210> 139
 <211> 1971
 <212> DNA
 <213> Homo Sapien

<400> 139
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 ccactgcctg tatagctgcc actggaggaa atgccccaga gagaggatgc 150
 aaaccagcaa gtgcgactgt atctggtttg gcctgctctt cctcaccttc 200

ctcctttccc tgagctggct gtacatcggg ctgctccttc tcaatgacct 250
gcacaacttc aatgaattcc tcttccgccg ctggggacac tggatggact 300
ggccccctggc attcctgctg gtcattcttc tactgggtcac atatgcatcc 350
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caacgacggg cacctggaat gcgccagata tatggacgtc agggaggcaa 1300
cagaacggag aggccccagt ttcttaacct cccctatcaa gatctgccac 1350
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 aggttttgaa ccatgagggc cctctgcccc ggtgatgggc attccctaag 1850
 ctgctatgga atctgctccc tttgggggtt tgacctgaga tgtttgggaa 1900
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 gtaaaagggg gattgctcgg a 1971

<210> 140
 <211> 539
 <212> PRT
 <213> Homo Sapien

<400> 140

Met	Ala	Glu	Ser	Pro	Gly	Cys	Cys	Ser	Val	Trp	Ala	Arg	Cys	Leu	1	5	10	15
His	Cys	Leu	Tyr	Ser	Cys	His	Trp	Arg	Lys	Cys	Pro	Arg	Glu	Arg	20	25	30	
Met	Gln	Thr	Ser	Lys	Cys	Asp	Cys	Ile	Trp	Phe	Gly	Leu	Leu	Phe	35	40	45	
Leu	Thr	Phe	Leu	Leu	Ser	Leu	Ser	Trp	Leu	Tyr	Ile	Gly	Leu	Val	50	55	60	
Leu	Leu	Asn	Asp	Leu	His	Asn	Phe	Asn	Glu	Phe	Leu	Phe	Arg	Arg	65	70	75	
Trp	Gly	His	Trp	Met	Asp	Trp	Ser	Leu	Ala	Phe	Leu	Leu	Val	Ile	80	85	90	
Ser	Leu	Leu	Val	Thr	Tyr	Ala	Ser	Leu	Leu	Leu	Val	Leu	Ala	Leu	95	100	105	
Leu	Leu	Arg	Leu	Cys	Arg	Gln	Pro	Leu	His	Leu	His	Ser	Leu	His	110	115	120	
Lys	Val	Leu	Leu	Leu	Leu	Ile	Met	Leu	Leu	Val	Ala	Ala	Gly	Leu	125	130	135	
Val	Gly	Leu	Asp	Ile	Gln	Trp	Gln	Gln	Glu	Trp	His	Ser	Leu	Arg	140	145	150	
Val	Ser	Leu	Gln	Ala	Thr	Ala	Pro	Phe	Leu	His	Ile	Gly	Ala	Ala	155	160	165	
Ala	Gly	Ile	Ala	Leu	Leu	Ala	Trp	Pro	Val	Ala	Asp	Thr	Phe	Tyr	170	175	180	
Arg	Ile	His	Arg	Arg	Gly	Pro	Lys	Ile	Leu	Leu	Leu	Leu	Leu	Phe	185	190	195	

Phe Gly Val Val	Leu Val Ile Tyr Leu	Ala Pro Leu Cys Ile Ser	200	205	210
Ser Pro Cys Ile	Met Glu Pro Arg Asp	Leu Pro Pro Lys Pro Gly	215	220	225
Leu Val Gly His	Arg Gly Ala Pro Met	Leu Ala Pro Glu Asn Thr	230	235	240
Leu Met Ser Leu	Arg Lys Thr Ala Glu	Cys Gly Ala Thr Val Phe	245	250	255
Glu Thr Asp Val	Met Val Ser Ser Asp	Gly Val Pro Phe Leu Met	260	265	270
His Asp Glu His	Leu Ser Arg Thr Thr	Asn Val Ala Ser Val Phe	275	280	285
Pro Thr Arg Ile	Thr Ala His Ser Ser	Asp Phe Ser Trp Thr Glu	290	295	300
Leu Lys Arg Leu	Asn Ala Gly Ser Trp	Phe Leu Glu Arg Arg Pro	305	310	315
Phe Trp Gly Ala	Lys Pro Leu Ala Gly	Pro Asp Gln Lys Glu Ala	320	325	330
Glu Ser Gln Thr	Val Pro Ala Leu Glu	Glu Leu Leu Glu Glu Ala	335	340	345
Ala Ala Leu Asn	Leu Ser Ile Met Phe	Asp Leu Arg Arg Pro Pro	350	355	360
Gln Asn His Thr	Tyr Tyr Asp Thr Phe	Val Ile Gln Thr Leu Glu	365	370	375
Thr Val Leu Asn	Ala Arg Val Pro Gln	Ala Met Val Phe Trp Leu	380	385	390
Pro Asp Glu Asp	Arg Ala Asn Val Gln	Arg Arg Ala Pro Gly Met	395	400	405
Arg Gln Ile Tyr	Gly Arg Gln Gly Gly	Asn Arg Thr Glu Arg Pro	410	415	420
Gln Phe Leu Asn	Leu Pro Tyr Gln Asp	Leu Pro Leu Leu Asp Ile	425	430	435
Lys Ala Leu His	Lys Asp Asn Val Ser	Val Asn Leu Phe Val Val	440	445	450
Asn Lys Pro Trp	Leu Phe Ser Leu Leu	Trp Cys Ala Gly Val Asp	455	460	465
Ser Val Thr Thr	Asn Asp Cys Gln Leu	Leu Gln Gln Met Arg Tyr	470	475	480
Pro Ile Trp Leu	Ile Thr Pro Gln Thr	Tyr Leu Ile Ile Trp Val			

485	490	495
Ile Thr Asn Cys Val Ser Thr Met Leu	Leu Leu Trp Thr Phe Leu	
500	505	510
Leu Gln Arg Arg Phe Val Lys Lys Arg	Gly Lys Thr Gly Leu Glu	
515	520	525
Thr Ala Val Leu Leu Thr Arg Ile Asn	Asn Phe Met Met Glu	
530	535	

<210> 141
 <211> 3671
 <212> DNA
 <213> Homo Sapien

<400> 141
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 ccggcgccaa ggctcgtggg ctccggggtcg gcgcggcccg cagaaggggc 200
 gggggcctcg ccccgcgagg ggaggcgcgc cccggggggcc ccgagagggg 250
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 ggcgttgcca tctgcttcac tgcccagtgt ggtgagataa actgcgagag 1500
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<210> 142

<211> 1036

<212> PRT

<213> Homo Sapien

<400> 142

Met	Tyr	Leu	Val	Ala	Gly	Asp	Arg	Gly	Leu	Ala	Gly	Cys	Gly	His
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Leu Leu Val Ser Leu Leu Gly Leu Leu Leu Leu Leu Ala Arg Ser

				20					25						30
Gly	Thr	Arg	Ala	Leu	Val	Cys	Leu	Pro	Cys	Asp	Glu	Ser	Lys	Cys	
				35					40					45	
Glu	Glu	Pro	Arg	Asn	Cys	Pro	Gly	Ser	Ile	Val	Gln	Gly	Val	Cys	
				50					55					60	
Gly	Cys	Cys	Tyr	Thr	Cys	Ala	Ser	Gln	Arg	Asn	Glu	Ser	Cys	Gly	
				65					70					75	
Gly	Thr	Phe	Gly	Ile	Tyr	Gly	Thr	Cys	Asp	Arg	Gly	Leu	Arg	Cys	
				80					85					90	
Val	Ile	Arg	Pro	Pro	Leu	Asn	Gly	Asp	Ser	Leu	Thr	Glu	Tyr	Glu	
				95					100					105	
Ala	Gly	Val	Cys	Glu	Asp	Glu	Asn	Trp	Thr	Asp	Asp	Gln	Leu	Leu	
				110					115					120	
Gly	Phe	Lys	Pro	Cys	Asn	Glu	Asn	Leu	Ile	Ala	Gly	Cys	Asn	Ile	
				125					130					135	
Ile	Asn	Gly	Lys	Cys	Glu	Cys	Asn	Thr	Ile	Arg	Thr	Cys	Ser	Asn	
				140					145					150	
Pro	Phe	Glu	Phe	Pro	Ser	Gln	Asp	Met	Cys	Leu	Ser	Ala	Leu	Lys	
				155					160					165	
Arg	Ile	Glu	Glu	Glu	Lys	Pro	Asp	Cys	Ser	Lys	Ala	Arg	Cys	Glu	
				170					175					180	
Val	Gln	Phe	Ser	Pro	Arg	Cys	Pro	Glu	Asp	Ser	Val	Leu	Ile	Glu	
				185					190					195	
Gly	Tyr	Ala	Pro	Pro	Gly	Glu	Cys	Cys	Pro	Leu	Pro	Ser	Arg	Cys	
				200					205					210	
Val	Cys	Asn	Pro	Ala	Gly	Cys	Leu	Arg	Lys	Val	Cys	Gln	Pro	Gly	
				215					220					225	
Asn	Leu	Asn	Ile	Leu	Val	Ser	Lys	Ala	Ser	Gly	Lys	Pro	Gly	Glu	
				230					235					240	
Cys	Cys	Asp	Leu	Tyr	Glu	Cys	Lys	Pro	Val	Phe	Gly	Val	Asp	Cys	
				245					250					255	
Arg	Thr	Val	Glu	Cys	Pro	Pro	Val	Gln	Gln	Thr	Ala	Cys	Pro	Pro	
				260					265					270	
Asp	Ser	Tyr	Glu	Thr	Gln	Val	Arg	Leu	Thr	Ala	Asp	Gly	Cys	Cys	
				275					280					285	
Thr	Leu	Pro	Thr	Arg	Cys	Glu	Cys	Leu	Ser	Gly	Leu	Cys	Gly	Phe	
				290					295					300	
Pro	Val	Cys	Glu	Val	Gly	Ser	Thr	Pro	Arg	Ile	Val	Ser	Arg	Gly	
				305					310					315	

Asp	Gly	Thr	Pro	Gly	Lys	Cys	Cys	Asp	Val	Phe	Glu	Cys	Val	Asn	320	325	330
Asp	Thr	Lys	Pro	Ala	Cys	Val	Phe	Asn	Asn	Val	Glu	Tyr	Tyr	Asp	335	340	345
Gly	Asp	Met	Phe	Arg	Met	Asp	Asn	Cys	Arg	Phe	Cys	Arg	Cys	Gln	350	355	360
Gly	Gly	Val	Ala	Ile	Cys	Phe	Thr	Ala	Gln	Cys	Gly	Glu	Ile	Asn	365	370	375
Cys	Glu	Arg	Tyr	Tyr	Val	Pro	Glu	Gly	Glu	Cys	Cys	Pro	Val	Cys	380	385	390
Glu	Asp	Pro	Val	Tyr	Pro	Phe	Asn	Asn	Pro	Ala	Gly	Cys	Tyr	Ala	395	400	405
Asn	Gly	Leu	Ile	Leu	Ala	His	Gly	Asp	Arg	Trp	Arg	Glu	Asp	Asp	410	415	420
Cys	Thr	Phe	Cys	Gln	Cys	Val	Asn	Gly	Glu	Arg	His	Cys	Val	Ala	425	430	435
Thr	Val	Cys	Gly	Gln	Thr	Cys	Thr	Asn	Pro	Val	Lys	Val	Pro	Gly	440	445	450
Glu	Cys	Cys	Pro	Val	Cys	Glu	Glu	Pro	Thr	Ile	Ile	Thr	Val	Asp	455	460	465
Pro	Pro	Ala	Cys	Gly	Glu	Leu	Ser	Asn	Cys	Thr	Leu	Thr	Gly	Lys	470	475	480
Asp	Cys	Ile	Asn	Gly	Phe	Lys	Arg	Asp	His	Asn	Gly	Cys	Arg	Thr	485	490	495
Cys	Gln	Cys	Ile	Asn	Thr	Glu	Glu	Leu	Cys	Ser	Glu	Arg	Lys	Gln	500	505	510
Gly	Cys	Thr	Leu	Asn	Cys	Pro	Phe	Gly	Phe	Leu	Thr	Asp	Ala	Gln	515	520	525
Asn	Cys	Glu	Ile	Cys	Glu	Cys	Arg	Pro	Arg	Pro	Lys	Lys	Cys	Arg	530	535	540
Pro	Ile	Ile	Cys	Asp	Lys	Tyr	Cys	Pro	Leu	Gly	Leu	Leu	Lys	Asn	545	550	555
Lys	His	Gly	Cys	Asp	Ile	Cys	Arg	Cys	Lys	Lys	Cys	Pro	Glu	Leu	560	565	570
Ser	Cys	Ser	Lys	Ile	Cys	Pro	Leu	Gly	Phe	Gln	Gln	Asp	Ser	His	575	580	585
Gly	Cys	Leu	Ile	Cys	Lys	Cys	Arg	Glu	Ala	Ser	Ala	Ser	Ala	Gly	590	595	600
Pro	Pro	Ile	Leu	Ser	Gly	Thr	Cys	Leu	Thr	Val	Asp	Gly	His	His			

	605		610		615
His Lys Asn Glu	Glu Ser Trp His Asp	Gly Cys Arg Glu Cys Tyr			
	620		625		630
Cys Leu Asn Gly	Arg Glu Met Cys Ala	Leu Ile Thr Cys Pro Val			
	635		640		645
Pro Ala Cys Gly	Asn Pro Thr Ile His	Pro Gly Gln Cys Cys Pro			
	650		655		660
Ser Cys Ala Asp	Asp Phe Val Val Gln	Lys Pro Glu Leu Ser Thr			
	665		670		675
Pro Ser Ile Cys	His Ala Pro Gly Gly	Glu Tyr Phe Val Glu Gly			
	680		685		690
Glu Thr Trp Asn	Ile Asp Ser Cys Thr	Gln Cys Thr Cys His Ser			
	695		700		705
Gly Arg Val Leu	Cys Glu Thr Glu Val	Cys Pro Pro Leu Leu Cys			
	710		715		720
Gln Asn Pro Ser	Arg Thr Gln Asp Ser	Cys Cys Pro Gln Cys Thr			
	725		730		735
Asp Gln Pro Phe	Arg Pro Ser Leu Ser	Arg Asn Asn Ser Val Pro			
	740		745		750
Asn Tyr Cys Lys	Asn Asp Glu Gly Asp	Ile Phe Leu Ala Ala Glu			
	755		760		765
Ser Trp Lys Pro	Asp Val Cys Thr Ser	Cys Ile Cys Ile Asp Ser			
	770		775		780
Val Ile Ser Cys	Phe Ser Glu Ser Cys	Pro Ser Val Ser Cys Glu			
	785		790		795
Arg Pro Val Leu	Arg Lys Gly Gln Cys	Cys Pro Tyr Cys Ile Glu			
	800		805		810
Asp Thr Ile Pro	Lys Lys Val Val Cys	His Phe Ser Gly Lys Ala			
	815		820		825
Tyr Ala Asp Glu	Glu Arg Trp Asp Leu	Asp Ser Cys Thr His Cys			
	830		835		840
Tyr Cys Leu Gln	Gly Gln Thr Leu Cys	Ser Thr Val Ser Cys Pro			
	845		850		855
Pro Leu Pro Cys	Val Glu Pro Ile Asn	Val Glu Gly Ser Cys Cys			
	860		865		870
Pro Met Cys Pro	Glu Met Tyr Val Pro	Glu Pro Thr Asn Ile Pro			
	875		880		885
Ile Glu Lys Thr	Asn His Arg Gly Glu	Val Asp Leu Glu Val Pro			
	890		895		900

Leu	Trp	Pro	Thr	Pro	Ser	Glu	Asn	Asp	Ile	Val	His	Leu	Pro	Arg	
				905					910					915	
Asp	Met	Gly	His	Leu	Gln	Val	Asp	Tyr	Arg	Asp	Asn	Arg	Leu	His	
				920					925					930	
Pro	Ser	Glu	Asp	Ser	Ser	Leu	Asp	Ser	Ile	Ala	Ser	Val	Val	Val	
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Pro	Ile	Ile	Ile	Cys	Leu	Ser	Ile	Ile	Ile	Ala	Phe	Leu	Phe	Ile	
				950					955					960	
Asn	Gln	Lys	Lys	Gln	Trp	Ile	Pro	Leu	Leu	Cys	Trp	Tyr	Arg	Thr	
				965					970					975	
Pro	Thr	Lys	Pro	Ser	Ser	Leu	Asn	Asn	Gln	Leu	Val	Ser	Val	Asp	
				980					985					990	
Cys	Lys	Lys	Gly	Thr	Arg	Val	Gln	Val	Asp	Ser	Ser	Gln	Arg	Met	
				995					1000					1005	
Leu	Arg	Ile	Ala	Glu	Pro	Asp	Ala	Arg	Phe	Ser	Gly	Phe	Tyr	Ser	
				1010					1015					1020	
Met	Gln	Lys	Gln	Asn	His	Leu	Gln	Ala	Asp	Asn	Phe	Tyr	Gln	Thr	
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Val															

<210> 143
 <211> 1985
 <212> DNA
 <213> Homo Sapien

<400> 143
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa 1985

<210> 144
 <211> 520
 <212> PRT
 <213> Homo Sapien

<400> 144

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Glu	Leu	Arg	Lys	Glu	Ala	Glu	Ala	Phe	Leu	Glu	Lys	Tyr	Gly	Tyr	35	40	45	
Leu	Asn	Glu	Gln	Val	Pro	Lys	Ala	Pro	Thr	Ser	Thr	Arg	Phe	Ser	50	55	60	
Asp	Ala	Ile	Arg	Ala	Phe	Gln	Trp	Val	Ser	Gln	Leu	Pro	Val	Ser	65	70	75	
Gly	Val	Leu	Asp	Arg	Ala	Thr	Leu	Arg	Gln	Met	Thr	Arg	Pro	Arg	80	85	90	
Cys	Gly	Val	Thr	Asp	Thr	Asn	Ser	Tyr	Ala	Ala	Trp	Ala	Glu	Arg	95	100	105	
Ile	Ser	Asp	Leu	Phe	Ala	Arg	His	Arg	Thr	Lys	Met	Arg	Arg	Lys	110	115	120	
Lys	Arg	Phe	Ala	Lys	Gln	Gly	Asn	Lys	Trp	Tyr	Lys	Gln	His	Leu	125	130	135	
Ser	Tyr	Arg	Leu	Val	Asn	Trp	Pro	Glu	His	Leu	Pro	Glu	Pro	Ala	140	145	150	
Val	Arg	Gly	Ala	Val	Arg	Ala	Ala	Phe	Gln	Leu	Trp	Ser	Asn	Val	155	160	165	
Ser	Ala	Leu	Glu	Phe	Trp	Glu	Ala	Pro	Ala	Thr	Gly	Pro	Ala	Asp	170	175	180	
Ile	Arg	Leu	Thr	Phe	Phe	Gln	Gly	Asp	His	Asn	Asp	Gly	Leu	Gly	185	190	195	
Asn	Ala	Phe	Asp	Gly	Pro	Gly	Gly	Ala	Leu	Ala	His	Ala	Phe	Leu	200	205	210	
Pro	Arg	Arg	Gly	Glu	Ala	His	Phe	Asp	Gln	Asp	Glu	Arg	Trp	Ser	215	220	225	
Leu	Ser	Arg	Arg	Arg	Gly	Arg	Asn	Leu	Phe	Val	Val	Leu	Ala	His	230	235	240	
Glu	Ile	Gly	His	Thr	Leu	Gly	Leu	Thr	His	Ser	Pro	Ala	Pro	Arg	245	250	255	
Ala	Leu	Met	Ala	Pro	Tyr	Tyr	Lys	Arg	Leu	Gly	Arg	Asp	Ala	Leu				

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Leu Ser Trp Asp	Asp Val Leu Ala Val	Gln Ser Leu Tyr Gly	Lys		
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Pro Leu Gly Gly	Ser Val Ala Val Gln	Leu Pro Gly Lys Leu	Phe		
	290		295		300
Thr Asp Phe Glu	Thr Trp Asp Ser Tyr	Ser Pro Gln Gly Arg	Arg		
	305		310		315
Pro Glu Thr Gln	Gly Pro Lys Tyr Cys	His Ser Ser Phe Asp	Ala		
	320		325		330
Ile Thr Val Asp	Arg Gln Gln Gln Leu	Tyr Ile Phe Lys Gly	Ser		
	335		340		345
His Phe Trp Glu	Val Ala Ala Asp Gly	Asn Val Ser Glu Pro	Arg		
	350		355		360
Pro Leu Gln Glu	Arg Trp Val Gly Leu	Pro Pro Asn Ile Glu	Ala		
	365		370		375
Ala Ala Val Ser	Leu Asn Asp Gly Asp	Phe Tyr Phe Phe Lys	Gly		
	380		385		390
Gly Arg Cys Trp	Arg Phe Arg Gly Pro	Lys Pro Val Trp Gly	Leu		
	395		400		405
Pro Gln Leu Cys	Arg Ala Gly Gly Leu	Pro Arg His Pro Asp	Ala		
	410		415		420
Ala Leu Phe Phe	Pro Pro Leu Arg Arg	Leu Ile Leu Phe Lys	Gly		
	425		430		435
Ala Arg Tyr Tyr	Val Leu Ala Arg Gly	Gly Leu Gln Val Glu	Pro		
	440		445		450
Tyr Tyr Pro Arg	Ser Leu Gln Asp Trp	Gly Gly Ile Pro Glu	Glu		
	455		460		465
Val Ser Gly Ala	Leu Pro Arg Pro Asp	Gly Ser Ile Ile Phe	Phe		
	470		475		480
Arg Asp Asp Arg	Tyr Trp Arg Leu Asp	Gln Ala Lys Leu Gln	Ala		
	485		490		495
Thr Thr Ser Gly	Arg Trp Ala Thr Glu	Leu Pro Trp Met Gly	Cys		
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Trp His Ala Asn	Ser Gly Ser Ala Leu	Phe			
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<210> 145
 <211> 3884
 <212> DNA
 <213> Homo Sapien

<400> 145

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Lys	Asn	Lys	Pro	Val	Glu	Leu	Arg	Cys	Arg	Ala	Phe	Pro	Ala	Thr	
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Gln	Ile	Tyr	Phe	Lys	Cys	Asn	Gly	Glu	Trp	Val	Ser	Gln	Asn	Asp	
				80					85					90	
His	Val	Thr	Gln	Glu	Gly	Leu	Asp	Glu	Ala	Thr	Gly	Leu	Arg	Val	
				95					100					105	
Arg	Glu	Val	Gln	Ile	Glu	Val	Ser	Arg	Gln	Gln	Val	Glu	Glu	Leu	
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Phe	Gly	Leu	Glu	Asp	Tyr	Trp	Cys	Gln	Cys	Val	Ala	Trp	Ser	Ser	
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Ala	Gly	Thr	Thr	Lys	Ser	Arg	Arg	Ala	Tyr	Val	Arg	Ile	Ala	Tyr	
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Leu	Arg	Lys	Asn	Phe	Asp	Gln	Glu	Pro	Leu	Gly	Lys	Glu	Val	Pro	
				155					160					165	
Leu	Asp	His	Glu	Val	Leu	Leu	Gln	Cys	Arg	Pro	Pro	Glu	Gly	Val	
				170					175					180	
Pro	Val	Ala	Glu	Val	Glu	Trp	Leu	Lys	Asn	Glu	Asp	Val	Ile	Asp	
				185					190					195	
Pro	Thr	Gln	Asp	Thr	Asn	Phe	Leu	Leu	Thr	Ile	Asp	His	Asn	Leu	
				200					205					210	
Ile	Ile	Arg	Gln	Ala	Arg	Leu	Ser	Asp	Thr	Ala	Asn	Tyr	Thr	Cys	
				215					220					225	
Val	Ala	Lys	Asn	Ile	Val	Ala	Lys	Arg	Arg	Ser	Thr	Thr	Ala	Thr	
				230					235					240	
Val	Ile	Val	Tyr	Val	Asn	Gly	Gly	Trp	Ser	Ser	Trp	Ala	Glu	Trp	
				245					250					255	
Ser	Pro	Cys	Ser	Asn	Arg	Cys	Gly	Arg	Gly	Trp	Gln	Lys	Arg	Thr	
				260					265					270	
Arg	Thr	Cys	Thr	Asn	Pro	Ala	Pro	Leu	Asn	Gly	Gly	Ala	Phe	Cys	
				275					280					285	
Glu	Gly	Gln	Ala	Phe	Gln	Lys	Thr	Ala	Cys	Thr	Thr	Ile	Cys	Pro	
				290					295					300	
Val	Asp	Gly	Ala	Trp	Thr	Glu	Trp	Ser	Lys	Trp	Ser	Ala	Cys	Ser	
				305					310					315	
Thr	Glu	Cys	Ala	His	Trp	Arg	Ser	Arg	Glu	Cys	Met	Ala	Pro	Pro	
				320					325					330	
Pro	Gln	Asn	Gly	Gly	Arg	Asp	Cys	Ser	Gly	Thr	Leu	Leu	Asp	Ser	
				335					340					345	
Lys	Asn	Cys	Thr	Asp	Gly	Leu	Cys	Met	Gln	Asn	Lys	Lys	Thr	Leu	

				350					355					360
Ser	Asp	Pro	Asn	Ser	His	Leu	Leu	Glu	Ala	Ser	Gly	Asp	Ala	Ala
				365					370					375
Leu	Tyr	Ala	Gly	Leu	Val	Val	Ala	Ile	Phe	Val	Val	Val	Ala	Ile
				380					385					390
Leu	Met	Ala	Val	Gly	Val	Val	Val	Tyr	Arg	Arg	Asn	Cys	Arg	Asp
				395					400					405
Phe	Asp	Thr	Asp	Ile	Thr	Asp	Ser	Ser	Ala	Ala	Leu	Thr	Gly	Gly
				410					415					420
Phe	His	Pro	Val	Asn	Phe	Lys	Thr	Ala	Arg	Pro	Ser	Asn	Pro	Gln
				425					430					435
Leu	Leu	His	Pro	Ser	Val	Pro	Pro	Asp	Leu	Thr	Ala	Ser	Ala	Gly
				440					445					450
Ile	Tyr	Arg	Gly	Pro	Val	Tyr	Ala	Leu	Gln	Asp	Ser	Thr	Asp	Lys
				455					460					465
Ile	Pro	Met	Thr	Asn	Ser	Pro	Leu	Leu	Asp	Pro	Leu	Pro	Ser	Leu
				470					475					480
Lys	Val	Lys	Val	Tyr	Ser	Ser	Ser	Thr	Thr	Gly	Ser	Gly	Pro	Gly
				485					490					495
Leu	Ala	Asp	Gly	Ala	Asp	Leu	Leu	Gly	Val	Leu	Pro	Pro	Gly	Thr
				500					505					510
Tyr	Pro	Ser	Asp	Phe	Ala	Arg	Asp	Thr	His	Phe	Leu	His	Leu	Arg
				515					520					525
Ser	Ala	Ser	Leu	Gly	Ser	Gln	Gln	Leu	Leu	Gly	Leu	Pro	Arg	Asp
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Pro	Gly	Ser	Ser	Val	Ser	Gly	Thr	Phe	Gly	Cys	Leu	Gly	Gly	Arg
				545					550					555
Leu	Ser	Ile	Pro	Gly	Thr	Gly	Val	Ser	Leu	Leu	Val	Pro	Asn	Gly
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Ala	Ile	Pro	Gln	Gly	Lys	Phe	Tyr	Glu	Met	Tyr	Leu	Leu	Ile	Asn
				575					580					585
Lys	Ala	Glu	Ser	Thr	Leu	Pro	Leu	Ser	Glu	Gly	Thr	Gln	Thr	Val
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Leu	Ser	Pro	Ser	Val	Thr	Cys	Gly	Pro	Thr	Gly	Leu	Leu	Leu	Cys
				605					610					615
Arg	Pro	Val	Ile	Leu	Thr	Met	Pro	His	Cys	Ala	Glu	Val	Ser	Ala
				620					625					630
Arg	Asp	Trp	Ile	Phe	Gln	Leu	Lys	Thr	Gln	Ala	His	Gln	Gly	His
				635					640					645

Trp	Glu	Glu	Val	Val	Thr	Leu	Asp	Glu	Glu	Thr	Leu	Asn	Thr	Pro
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Cys	Tyr	Cys	Gln	Leu	Glu	Pro	Arg	Ala	Cys	His	Ile	Leu	Leu	Asp
				665					670					675
Gln	Leu	Gly	Thr	Tyr	Val	Phe	Thr	Gly	Glu	Ser	Tyr	Ser	Arg	Ser
				680					685					690
Ala	Val	Lys	Arg	Leu	Gln	Leu	Ala	Val	Phe	Ala	Pro	Ala	Leu	Cys
				695					700					705
Thr	Ser	Leu	Glu	Tyr	Ser	Leu	Arg	Val	Tyr	Cys	Leu	Glu	Asp	Thr
				710					715					720
Pro	Val	Ala	Leu	Lys	Glu	Val	Leu	Glu	Leu	Glu	Arg	Thr	Leu	Gly
				725					730					735
Gly	Tyr	Leu	Val	Glu	Glu	Pro	Lys	Pro	Leu	Met	Phe	Lys	Asp	Ser
				740					745					750
Tyr	His	Asn	Leu	Arg	Leu	Ser	Leu	His	Asp	Leu	Pro	His	Ala	His
				755					760					765
Trp	Arg	Ser	Lys	Leu	Leu	Ala	Lys	Tyr	Gln	Glu	Ile	Pro	Phe	Tyr
				770					775					780
His	Ile	Trp	Ser	Gly	Ser	Gln	Lys	Ala	Leu	His	Cys	Thr	Phe	Thr
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Leu	Glu	Arg	His	Ser	Leu	Ala	Ser	Thr	Glu	Leu	Thr	Cys	Lys	Ile
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Cys	Val	Arg	Gln	Val	Glu	Gly	Glu	Gly	Gln	Ile	Phe	Gln	Leu	His
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Thr	Thr	Leu	Ala	Glu	Thr	Pro	Ala	Gly	Ser	Leu	Asp	Thr	Leu	Cys
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Ser	Ala	Pro	Gly	Ser	Thr	Val	Thr	Thr	Gln	Leu	Gly	Pro	Tyr	Ala
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Phe	Lys	Ile	Pro	Leu	Ser	Ile	Arg	Gln	Lys	Ile	Cys	Asn	Ser	Leu
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Asp	Ala	Pro	Asn	Ser	Arg	Gly	Asn	Asp	Trp	Arg	Met	Leu	Ala	Gln
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Lys	Leu	Ser	Met	Asp	Arg	Tyr	Leu	Asn	Tyr	Phe	Ala	Thr	Lys	Ala
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Ser	Pro	Thr	Gly	Val	Ile	Leu	Asp	Leu	Trp	Glu	Ala	Leu	Gln	Gln
				905					910					915
Asp	Asp	Gly	Asp	Leu	Asn	Ser	Leu	Ala	Ser	Ala	Leu	Glu	Glu	Met
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Gly	Lys	Ser	Glu	Met	Leu	Val	Ala	Val	Ala	Thr	Asp	Gly	Asp	Cys

<210> 147
 <211> 3734
 <212> DNA
 <213> Homo Sapien

<400> 147

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 ggtgtccccg aggccaactt ctccagcatg gtccaggagg agaacagcac 1150
 cttcaacgcc cttccagccc tggctgcat gcagacatcc agcgtgggtgc 1200
 aagagctgaa gaaggcagtg gccagcagc cggaaggggt gaggacactg 1250

gctgaagggt tcccgggctt ggaggcagct tcccgctggg cccaggcact 1300
gcaggaggtg gaggagagca gccgccccta cctgcaggag gtgcagagat 1350
acgagaccta caggtggatc gtgggctgcg tgctgtgctc cgtggtccta 1400
ttcgtggtgc tctgcaacct gctgggcctc aatctgggca tctggggcct 1450
gtctgccagg gacgacccca gccacccaga agccaagggc gaggctggag 1500
cccgtttcct catggcaggt gtgggcctca gcttcctctt tgctgcaccc 1550
ctcatcctcc tgggtgttcgc caccttcctg gtgggtggca acgtgcagac 1600
gctggtgtgc cggagctggg agaacggcga gctctttgag tttgcagaca 1650
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agcgtctctg acagtcctgc agctcaacga ctctacgac ctggaggagc 1800
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atgggacttc tgtgcagctg cagagccagc aagtccttac aggtgtcacc 2850
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tgctggagcc tggaccctgg ggtgggacag aggcctcgtc caaccccact 2950
ccccttcccg tgtgtcttcc ccctgccaag cctccccctg ccaagcctcc 3000
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tcccttagtc ccctcttcac catatctcca ctgctacctt gctggcccca 3150
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ccaactttct taggagtgat ctggtggcca gaacaggatt ttgcacggcc 3550
ccttttatcc tgcgcatgtg gcctagggtc atccccagcc catccctgtg 3600
tcagccctga gtgctggaca ctgcgttcca gaaatgagga agaggagaga 3650
gaagagatgg acagacctca gatccattaa agtgttctca cttcaaaaaa 3700
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 3734

<210> 148
<211> 834
<212> PRT
<213> Homo Sapien

<400> 148
Met Lys His Thr Leu Ala Leu Leu Ala Pro Leu Leu Gly Leu Gly
1 5 10 15
Leu Gly Leu Ala Leu Ser Gln Leu Ala Ala Gly Ala Thr Asp Cys
20 25 30
Lys Phe Leu Gly Pro Ala Glu His Leu Thr Phe Thr Pro Ala Ala
35 40 45
Arg Ala Arg Trp Leu Ala Pro Arg Val Arg Ala Pro Gly Leu Leu

				50						55					60
Asp	Ser	Leu	Tyr	Gly	Thr	Val	Arg	Arg	Phe	Leu	Ser	Val	Val	Gln	
				65					70					75	
Leu	Asn	Pro	Phe	Pro	Ser	Glu	Leu	Val	Lys	Ala	Leu	Leu	Asn	Glu	
				80					85					90	
Leu	Ala	Ser	Val	Lys	Val	Asn	Glu	Val	Val	Arg	Tyr	Glu	Ala	Gly	
				95					100					105	
Tyr	Val	Val	Cys	Ala	Val	Ile	Ala	Gly	Leu	Tyr	Leu	Leu	Leu	Val	
				110					115					120	
Pro	Thr	Ala	Gly	Leu	Cys	Phe	Cys	Cys	Cys	Arg	Cys	His	Arg	Arg	
				125					130					135	
Cys	Gly	Gly	Arg	Val	Lys	Thr	Glu	His	Lys	Ala	Leu	Ala	Cys	Glu	
				140					145					150	
Arg	Ala	Ala	Leu	Met	Val	Phe	Leu	Leu	Leu	Thr	Thr	Leu	Leu	Leu	
				155					160					165	
Leu	Ile	Gly	Val	Val	Cys	Ala	Phe	Val	Thr	Asn	Gln	Arg	Thr	His	
				170					175					180	
Glu	Gln	Met	Gly	Pro	Ser	Ile	Glu	Ala	Met	Pro	Glu	Thr	Leu	Leu	
				185					190					195	
Ser	Leu	Trp	Gly	Leu	Val	Ser	Asp	Val	Pro	Gln	Glu	Leu	Gln	Ala	
				200					205					210	
Val	Ala	Gln	Gln	Phe	Ser	Leu	Pro	Gln	Glu	Gln	Val	Ser	Glu	Glu	
				215					220					225	
Leu	Asp	Gly	Val	Gly	Val	Ser	Ile	Gly	Ser	Ala	Ile	His	Thr	Gln	
				230					235					240	
Leu	Arg	Ser	Ser	Val	Tyr	Pro	Leu	Leu	Ala	Ala	Val	Gly	Ser	Leu	
				245					250					255	
Gly	Gln	Val	Leu	Gln	Val	Ser	Val	His	His	Leu	Gln	Thr	Leu	Asn	
				260					265					270	
Ala	Thr	Val	Val	Glu	Leu	Gln	Ala	Gly	Gln	Gln	Asp	Leu	Glu	Pro	
				275					280					285	
Ala	Ile	Arg	Glu	His	Arg	Asp	Arg	Leu	Leu	Glu	Leu	Leu	Gln	Glu	
				290					295					300	
Ala	Arg	Cys	Gln	Gly	Asp	Cys	Ala	Gly	Ala	Leu	Ser	Trp	Ala	Arg	
				305					310					315	
Thr	Leu	Glu	Leu	Gly	Ala	Asp	Phe	Ser	Gln	Val	Pro	Ser	Val	Asp	
				320					325					330	
His	Val	Leu	His	Gln	Leu	Lys	Gly	Val	Pro	Glu	Ala	Asn	Phe	Ser	
				335					340					345	

Ser	Met	Val	Gln	Glu	Glu	Asn	Ser	Thr	Phe	Asn	Ala	Leu	Pro	Ala	350	355	360
Leu	Ala	Ala	Met	Gln	Thr	Ser	Ser	Val	Val	Gln	Glu	Leu	Lys	Lys	365	370	375
Ala	Val	Ala	Gln	Gln	Pro	Glu	Gly	Val	Arg	Thr	Leu	Ala	Glu	Gly	380	385	390
Phe	Pro	Gly	Leu	Glu	Ala	Ala	Ser	Arg	Trp	Ala	Gln	Ala	Leu	Gln	395	400	405
Glu	Val	Glu	Glu	Ser	Ser	Arg	Pro	Tyr	Leu	Gln	Glu	Val	Gln	Arg	410	415	420
Tyr	Glu	Thr	Tyr	Arg	Trp	Ile	Val	Gly	Cys	Val	Leu	Cys	Ser	Val	425	430	435
Val	Leu	Phe	Val	Val	Leu	Cys	Asn	Leu	Leu	Gly	Leu	Asn	Leu	Gly	440	445	450
Ile	Trp	Gly	Leu	Ser	Ala	Arg	Asp	Asp	Pro	Ser	His	Pro	Glu	Ala	455	460	465
Lys	Gly	Glu	Ala	Gly	Ala	Arg	Thr	Leu	Met	Ala	Gly	Val	Gly	Leu	470	475	480
Ser	Phe	Leu	Phe	Ala	Ala	Pro	Leu	Ile	Leu	Leu	Val	Phe	Ala	Thr	485	490	495
Phe	Leu	Val	Gly	Gly	Asn	Val	Gln	Thr	Leu	Val	Cys	Arg	Ser	Trp	500	505	510
Glu	Asn	Gly	Glu	Leu	Phe	Glu	Phe	Ala	Asp	Thr	Pro	Gly	Asn	Leu	515	520	525
Pro	Pro	Ser	Met	Asn	Leu	Ser	Gln	Leu	Leu	Gly	Leu	Arg	Lys	Asn	530	535	540
Ile	Ser	Ile	His	Gln	Ala	Tyr	Gln	Gln	Cys	Lys	Glu	Gly	Ala	Ala	545	550	555
Leu	Trp	Thr	Val	Leu	Gln	Leu	Asn	Asp	Ser	Tyr	Asp	Leu	Glu	Glu	560	565	570
His	Leu	Asp	Ile	Asn	Gln	Tyr	Thr	Asn	Lys	Leu	Arg	Gln	Glu	Leu	575	580	585
Gln	Ser	Leu	Lys	Val	Asp	Thr	Gln	Ser	Leu	Asp	Leu	Leu	Ser	Ser	590	595	600
Ala	Ala	Arg	Arg	Asp	Leu	Glu	Ala	Leu	Gln	Ser	Ser	Gly	Leu	Gln	605	610	615
Arg	Ile	His	Tyr	Pro	Asp	Phe	Leu	Val	Gln	Ile	Gln	Arg	Pro	Val	620	625	630
Val	Lys	Thr	Ser	Met	Glu	Gln	Leu	Ala	Gln	Glu	Leu	Gln	Gly	Leu			

	635		640		645
Ala Gln Ala Gln	Asp Asn Ser Val Leu	Gly Gln Arg Leu Gln Glu			
	650		655		660
Glu Ala Gln Gly	Leu Arg Asn Leu His	Gln Glu Lys Val Val Pro			
	665		670		675
Gln Gln Ser Leu	Val Ala Lys Leu Asn	Leu Ser Val Arg Ala Leu			
	680		685		690
Glu Ser Ser Ala	Pro Asn Leu Gln Leu	Glu Thr Ser Asp Val Leu			
	695		700		705
Ala Asn Val Thr	Tyr Leu Lys Gly Glu	Leu Pro Ala Trp Ala Ala			
	710		715		720
Arg Ile Leu Arg	Asn Val Ser Glu Cys	Phe Leu Ala Arg Glu Met			
	725		730		735
Gly Tyr Phe Ser	Gln Tyr Val Ala Trp	Val Arg Glu Glu Val Thr			
	740		745		750
Gln Arg Ile Ala	Thr Cys Gln Pro Leu	Ser Gly Ala Leu Asp Asn			
	755		760		765
Ser Arg Val Ile	Leu Cys Asp Met Met	Ala Asp Pro Trp Asn Ala			
	770		775		780
Phe Trp Phe Cys	Leu Ala Trp Cys Thr	Phe Phe Leu Ile Pro Ser			
	785		790		795
Ile Ile Phe Ala	Val Lys Thr Ser Lys	Tyr Phe Arg Pro Ile Arg			
	800		805		810
Lys Arg Leu Ser	Ser Thr Ser Ser Glu	Glu Thr Gln Leu Phe His			
	815		820		825
Ile Pro Arg Val	Thr Ser Leu Lys Leu				
	830				

<210> 149
 <211> 804
 <212> DNA
 <213> Homo Sapien

<400> 149
 cacagctccc ttcccaggac gtgaaaatct gccttctcac catgaggctt 50
 ctagtccttt ccagcctgct ctgtatcctg cttctctgct tctccatctt 100
 ctccacagaa gggaagaggc gtcctgccaa ggcctgggtca ggcaggagaa 150
 ccaggctctg ctgccaccga gtccttagcc ccaactcaac aaacctgaaa 200
 ggacatcatg tgaggctctg taaaccatgc aagcttgagc cagagccccg 250
 cctttgggtg gtgcctgggg cactcccaca ggtgtagcac tcccaaagca 300

agactccaga cagcggagaa cctcatgcct ggcacctgag gtacctcagca 350
 gcctcctgtc tcccctttca gccttcacag cagtgcgctg caatgttgga 400
 gggcttcacg tcgggctgca aggacctgg gaaagttcca gaactccacg 450
 tccttgcttc aattgtgcca tcaactttca gagctatcat gagccaacct 500
 caccacacag ggcctcagtc gccaccatgt ggcctctctc agtgcaaacc 550
 accgagcatt ccaccatgac cggtcacagc tacaaatcca gagaccatca 600
 atcctgctag agtgcagggt ggcaagcacc caagggtggc tgaccaagac 650
 tgcagagtct cctccatctt cagggtccatt cagcctcctg gcatttaact 700
 accagcatcc agtgggtccc aaggaatccc ttcctagcct cctgacatga 750
 gtctgctgga aagagcatcc aaacaaacaa gtaataaata aataaataaa 800
 ctca 804

<210> 150
 <211> 81
 <212> PRT
 <213> Homo Sapien

<400> 150
 Met Arg Leu Leu Val Leu Ser Ser Leu Leu Cys Ile Leu Leu Leu 15
 1 5 10
 Cys Phe Ser Ile Phe Ser Thr Glu Gly Lys Arg Arg Pro Ala Lys 30
 20 25
 Ala Trp Ser Gly Arg Arg Thr Arg Leu Cys Cys His Arg Val Pro 45
 35 40
 Ser Pro Asn Ser Thr Asn Leu Lys Gly His His Val Arg Leu Cys 60
 50 55
 Lys Pro Cys Lys Leu Glu Pro Glu Pro Arg Leu Trp Val Val Pro 75
 65 70
 Gly Ala Leu Pro Gln Val 80

<210> 151
 <211> 2164
 <212> DNA
 <213> Homo Sapien

<400> 151
 caccggaggg caccgagctg acggagctgc gctgcgttcg cctcgtttgc 50
 ctcgcgccct ccactggagc tgttcgcgcc tcccggctcc caccgagcc 100
 caccggcagc aggagtcgct accagcgccc agtgcgctct gtcagtcgcg 150

aaactccttg ccgcccggcc cgggctgggc accaaatacc aggctaccat 200
 ggtctacaag actctcttcg ctctttgcat cttaactgca ggatggaggg 250
 tacagagtct gcctacatca gctcctttgt ctgtttctct tccgacaaac 300
 attgtaccac cgaccaccat ctggactagc tctccacaaa aactgatgc 350
 agacactgcc tccccatcca acggcactca caacaactcg gtgctcccag 400
 ttacagcatc agccccaaca tctctgcttc ctaagaacat ttccatagag 450
 tccagagaag aggagatcac cagcccaggt tcgaattggg aaggcacaaa 500
 cacagacccc tcaccttctg gggtctcgtc aacaagcggg ggagtccact 550
 taacaaccac gttggaggaa cacagctcgg gcactcctga agcaggcgtg 600
 gcagctacac tgtcgcagtc cgtctgtgag cctcccacac tcctctcccc 650
 tcaagctcca gcctcatcac cctcatccct atcaacctca ccacctgagg 700
 tcttttctgc ctccgttact accaaccata gctccactgt gaccagcacc 750
 caaccactg gagtccaac tgcaccagag tccccgacag aggagtccag 800
 ctctgaccac acaccactt cacatgccac agctgagcca gtgccccagg 850
 agaaaacacc cccaacaact gtgtcaggca aagtgatgtg tgagctcata 900
 gacatggaga ccaccaccac ctttcccagg gtgatcatgc aggaagtaga 950
 acatgcatta agttcaggca gcctgcggc cattaccgtg acagtcattg 1000
 ccgtgggtgct gctgggtgtt ggagttgcag cctacctaaa aatcaggcat 1050
 tcctcctatg gaagactttt ggacgaccat gactacgggt cctggggaaa 1100
 ctacaacaac cctctgtacg atgactccta acaatggaat atggcctggg 1150
 atgaggatta actgttcttt atttataagt gcttatccag tagaattaat 1200
 aagtacctga tgcgcattga acgacaatct taagccctgt tttgttggtg 1250
 tggttgtttt tgttttcctc cctctcctct ggctgctaca acttcccctt 1300
 tctggtacaa gaagaaccat tctttaaagg tgagtggagg ctgatttgca 1350
 gctgaagtgg gccagccttg caccagccag gccagaccac catgggtgaag 1400
 gcttctttcc cactgcagg acccactttg agaaggatcg aggaggagga 1450
 tttgggttgt tttgttaggg gttactttca ggggaacatt tcatttgtgt 1500
 tatttcttaa acttctattt aggaaattac attaagtatt aatgagggga 1550
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 ttaatgaaag atgaaaatag gaagtgcctt ggagggggcc agcaggtcac 1750
 ggggcagaat ctctcaggtt gctgtgggat ctcagtgtgc ccctacctgt 1800
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 aggcagctgg gatcccagcc cacaagtgat cagcagagtt gcatttccaa 1900
 agaaaaaggc tatgagatga gctgagttat agagagaaag ggagaggcat 1950
 gtacggtgtg ggggaagtga agagaagctg gcgggggaga aggaggctaa 2000
 cctgcactga gtacttcatt aggacaagtg agaatcagct attgataatg 2050
 gccagagata tccacagctt ggaggagccc agagactggt tgctttatac 2100
 ccacacagca actggtccac tgctttactg tctgttggtt aatggctgta 2150
 aaatgtttta aaac 2164

<210> 152
 <211> 310
 <212> PRT
 <213> Homo Sapien

<400> 152
 Met Val Tyr Lys Thr Leu Phe Ala Leu Cys Ile Leu Thr Ala Gly
 1 5 10 15
 Trp Arg Val Gln Ser Leu Pro Thr Ser Ala Pro Leu Ser Val Ser
 20 25 30
 Leu Pro Thr Asn Ile Val Pro Pro Thr Thr Ile Trp Thr Ser Ser
 35 40 45
 Pro Gln Asn Thr Asp Ala Asp Thr Ala Ser Pro Ser Asn Gly Thr
 50 55 60
 His Asn Asn Ser Val Leu Pro Val Thr Ala Ser Ala Pro Thr Ser
 65 70 75
 Leu Leu Pro Lys Asn Ile Ser Ile Glu Ser Arg Glu Glu Glu Ile
 80 85 90
 Thr Ser Pro Gly Ser Asn Trp Glu Gly Thr Asn Thr Asp Pro Ser
 95 100 105
 Pro Ser Gly Phe Ser Ser Thr Ser Gly Gly Val His Leu Thr Thr
 110 115 120
 Thr Leu Glu Glu His Ser Ser Gly Thr Pro Glu Ala Gly Val Ala
 125 130 135
 Ala Thr Leu Ser Gln Ser Ala Ala Glu Pro Pro Thr Leu Ile Ser

				140						145					150
Pro	Gln	Ala	Pro	Ala	Ser	Ser	Pro	Ser	Ser	Leu	Ser	Thr	Ser	Pro	
				155					160					165	
Pro	Glu	Val	Phe	Ser	Ala	Ser	Val	Thr	Thr	Asn	His	Ser	Ser	Thr	
				170					175					180	
Val	Thr	Ser	Thr	Gln	Pro	Thr	Gly	Ala	Pro	Thr	Ala	Pro	Glu	Ser	
				185					190					195	
Pro	Thr	Glu	Glu	Ser	Ser	Ser	Asp	His	Thr	Pro	Thr	Ser	His	Ala	
				200					205					210	
Thr	Ala	Glu	Pro	Val	Pro	Gln	Glu	Lys	Thr	Pro	Pro	Thr	Thr	Val	
				215					220					225	
Ser	Gly	Lys	Val	Met	Cys	Glu	Leu	Ile	Asp	Met	Glu	Thr	Thr	Thr	
				230					235					240	
Thr	Phe	Pro	Arg	Val	Ile	Met	Gln	Glu	Val	Glu	His	Ala	Leu	Ser	
				245					250					255	
Ser	Gly	Ser	Ile	Ala	Ala	Ile	Thr	Val	Thr	Val	Ile	Ala	Val	Val	
				260					265					270	
Leu	Leu	Val	Phe	Gly	Val	Ala	Ala	Tyr	Leu	Lys	Ile	Arg	His	Ser	
				275					280					285	
Ser	Tyr	Gly	Arg	Leu	Leu	Asp	Asp	His	Asp	Tyr	Gly	Ser	Trp	Gly	
				290					295					300	
Asn	Tyr	Asn	Asn	Pro	Leu	Tyr	Asp	Asp	Ser						
				305					310						

<210> 153
 <211> 755
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 67
 <223> unknown base

<400> 153
 acgtcactgt cttgaagcag cagtagcctg ggaagtgagg caggaggaat 50
 tgagaggcag gaagggngct ggagacacag ctgagcctgg aaatgagagt 100
 gggcatcgcc gtggatcatca tgactcctct gcggcgtggt caccatgttg 150
 gttcactgtg ttgggctctt attgacgggt ctctgctag gcctgacctt 200
 gggtgccgga gccctgctgg cttctgagcc tatctaccaa ccaccttcag 250
 cctgggtgcc agctgggggg ctggtggggc tggcgctgct gggagccctg 300

ctcacacttc ggtggccacg tccattcaca gttctgggca caaccctgct 350
 gggttctgca gtgcttgtgg cctgtgttga ctacttcctg gaggggctgg 400
 cactggggag ttggctgggc caacgcctgc agacacttcc agccttgcct 450
 tctctctgct gatatagctg ggtcttactg gggatctggc cagccttggg 500
 ggcccttgga gccctggccc agtgggaagct cgtgcctgag gaacatggag 550
 gccacgctaa tgggtctgtt cctggtttcc cagatgcata aaggaagaca 600
 tatccctccc ctgggcagca aggctacaat gggagggagg gagaacatgg 650
 gagcatgtga ataaaatggc attaaatact gaaaaaaaaa aaaaaaaaaa 700
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 750
 aaaaaa 755

<210> 154
 <211> 105
 <212> PRT
 <213> Homo Sapien

<400> 154
 Met Leu Val His Cys Val Gly Leu Leu Leu Thr Gly Leu Leu Leu 15
 1 5 10
 Gly Leu Thr Leu Gly Ala Gly Ala Leu Leu Ala Ser Glu Pro Ile 30
 20 25
 Tyr Gln Pro Pro Ser Ala Trp Val Pro Ala Gly Gly Leu Val Gly 45
 35 40
 Leu Ala Leu Leu Gly Ala Leu Leu Thr Leu Arg Trp Pro Arg Pro 60
 50 55
 Phe Thr Val Leu Gly Thr Thr Leu Leu Gly Ser Ala Val Leu Val 75
 65 70
 Ala Cys Val Asp Tyr Phe Leu Glu Gly Leu Ala Leu Gly Ser Trp 90
 80 85
 Leu Gly Gln Arg Leu Gln Thr Leu Pro Ala Leu Pro Ser Leu Cys 105
 95 100

<210> 155
 <211> 1825
 <212> DNA
 <213> Homo Sapien

<400> 155
 tgcaattaaa ggagtcgggt ctctaactgt tgatctgttt ttttcccttc 50
 tgagcaatgg agcttaccat ctttatcctg agactggcca tttacatcct 100
 gacatttccc ttgtacctgc tgaactttct gggcttgtgg agctggatat 150

gcaaaaaatg gttcccctac ttcttggtga ggttcactgt gatatacaac 200
gaacagatgg caagcaagaa gcgggagctc ttcagtaacc tgcaggagtt 250
tgcgggcccc tccgggaaac tctccctgct ggaagtgggc tgtggcacgg 300
gggccaactt caagttctac ccacctgggt gcagggtgac ctgtattgac 350
cccaacccca actttgagaa gtttttgatc aagagcattg cagagaaccg 400
acacctgcag tttgagcgct ttgtggtagc tgccggggag aacatgcacc 450
aggtggctga tggctctgtg gatgtgggtg tctgcaccct ggtgctgtgc 500
tctgtgaaga accaggagcg gattctccgc gaggtgtgca gagtgctgag 550
accgggaggg gctttctatt tcatggagca tgtggcagct gagtgttcga 600
cttgaatta cttctggcaa caagtcctgg atcctgcctg gcaccttctg 650
tttgatgggt gcaacctgac cagagagagc tggaaggccc tggagcgggc 700
cagcttctct aagctgaagc tgcagcacat ccaggcccca ctgtcctggg 750
agttgggtgc ccctcatatc tatggatatg ctgtgaaata gtgtgagctg 800
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ttggtttggt gttgggtttt tttttttttt tggcaggaga atctcttgaa 950
cccagaaggc gaaggttgca gtgaaccgag atcatgccat tgtactctag 1000
cctgggtgac aagagcaaga ctccgtctca aaaaaaaaaa aaaaaaaaaa 1050
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tcttttattc cagtattcca ccaaagtttg ttttcctgca ttccagttct 1350
caagtcttaa gataaagatt gtacttgaca gtttagtata tccataaaac 1400
tatttgaggt ggttaagggt cttgggttca ttttccttaa tactttgctg 1450
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gagtctgtaa agaaataaat attttttggg ttattcttat ctaattccac 1600

ccctgttgga agatgatttc tttgttcttt gcaactatgg aagctgtgaa 1650
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aatattttct gcaatgggtt gtaggaattt taataaatgt agtatatttt 1750
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attcacattt gtgttaggaa caaaa 1825

<210> 156

<211> 244

<212> PRT

<213> Homo Sapien

<400> 156

Met	Glu	Leu	Thr	Ile	Phe	Ile	Leu	Arg	Leu	Ala	Ile	Tyr	Ile	Leu	
1				5					10					15	
Thr	Phe	Pro	Leu	Tyr	Leu	Leu	Asn	Phe	Leu	Gly	Leu	Trp	Ser	Trp	
				20					25					30	
Ile	Cys	Lys	Lys	Trp	Phe	Pro	Tyr	Phe	Leu	Val	Arg	Phe	Thr	Val	
				35					40					45	
Ile	Tyr	Asn	Glu	Gln	Met	Ala	Ser	Lys	Lys	Arg	Glu	Leu	Phe	Ser	
				50					55					60	
Asn	Leu	Gln	Glu	Phe	Ala	Gly	Pro	Ser	Gly	Lys	Leu	Ser	Leu	Leu	
				65					70					75	
Glu	Val	Gly	Cys	Gly	Thr	Gly	Ala	Asn	Phe	Lys	Phe	Tyr	Pro	Pro	
				80					85					90	
Gly	Cys	Arg	Val	Thr	Cys	Ile	Asp	Pro	Asn	Pro	Asn	Phe	Glu	Lys	
				95					100					105	
Phe	Leu	Ile	Lys	Ser	Ile	Ala	Glu	Asn	Arg	His	Leu	Gln	Phe	Glu	
				110					115					120	
Arg	Phe	Val	Val	Ala	Ala	Gly	Glu	Asn	Met	His	Gln	Val	Ala	Asp	
				125					130					135	
Gly	Ser	Val	Asp	Val	Val	Val	Cys	Thr	Leu	Val	Leu	Cys	Ser	Val	
				140					145					150	
Lys	Asn	Gln	Glu	Arg	Ile	Leu	Arg	Glu	Val	Cys	Arg	Val	Leu	Arg	
				155					160					165	
Pro	Gly	Gly	Ala	Phe	Tyr	Phe	Met	Glu	His	Val	Ala	Ala	Glu	Cys	
				170					175					180	
Ser	Thr	Trp	Asn	Tyr	Phe	Trp	Gln	Gln	Val	Leu	Asp	Pro	Ala	Trp	
				185					190					195	
His	Leu	Leu	Phe	Asp	Gly	Cys	Asn	Leu	Thr	Arg	Glu	Ser	Trp	Lys	
				200					205					210	

Ala Leu Glu Arg Ala Ser Phe Ser Lys Leu Lys Leu Gln His Ile
 215 220 225

Gln Ala Pro Leu Ser Trp Glu Leu Val Arg Pro His Ile Tyr Gly
 230 235 240

Tyr Ala Val Lys

<210> 157

<211> 1328

<212> DNA

<213> Homo Sapien

<400> 157

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 tgcttcattc tccaccgcgc ctatgggtccc tcttggagcc agcgtggcgg 150
 gcctggcggc tcccgggtgg tgagagagcg gtccgggaac gatgaaggcc 200
 tcgcagtgtc gctgctgtct cagccacctc ttggcttcctg tcctcctcct 250
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 tttcctgctt accatatgat tgtaaattgt tttatgtatt aatcagttaa 1100

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aaccaactgg tgtgtaaaaa taatttaaaa tttcctttac tgaaaggat 1200
ttcccatttt tgtggggaaa agaagccaaa tttattactt tgtggtgggg 1250
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atgattttta attctcttaa aaaaaaaaa 1328

<210> 158
<211> 190
<212> PRT
<213> Homo Sapien

<400> 158
Met Lys Ala Ser Gln Cys Cys Cys Cys Leu Ser His Leu Leu Ala
1 5 10 15
Ser Val Leu Leu Leu Leu Leu Leu Pro Glu Leu Ser Gly Pro Leu
20 25 30
Ala Val Leu Leu Gln Ala Ala Glu Ala Ala Pro Gly Leu Gly Pro
35 40 45
Pro Asp Pro Arg Pro Arg Thr Leu Pro Pro Leu Pro Pro Gly Pro
50 55 60
Thr Pro Ala Gln Gln Pro Gly Arg Gly Leu Ala Glu Ala Ala Gly
65 70 75
Pro Arg Gly Ser Glu Gly Gly Asn Gly Ser Asn Pro Val Ala Gly
80 85 90
Leu Glu Thr Asp Asp His Gly Gly Lys Ala Gly Glu Gly Ser Val
95 100 105
Gly Gly Gly Leu Ala Val Ser Pro Asn Pro Gly Asp Lys Pro Met
110 115 120
Thr Gln Arg Ala Leu Thr Val Leu Met Val Val Ser Gly Ala Val
125 130 135
Leu Val Tyr Phe Val Val Arg Thr Val Arg Met Arg Arg Arg Asn
140 145 150
Arg Lys Thr Arg Arg Tyr Gly Val Leu Asp Thr Asn Ile Glu Asn
155 160 165
Met Glu Leu Thr Pro Leu Glu Gln Asp Asp Glu Asp Asp Asp Asn
170 175 180
Thr Leu Phe Asp Ala Asn His Pro Arg Arg
185 190

<210> 159
<211> 2167
<212> DNA

<213> Homo Sapien

<400> 159

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tcctgggtgc ctgtgtggct gggctgatg agcctggccc agagggcctc 150
acctccacct ccctgctaga cctcctgctg cccactggct tggagccact 200
ggactcagag gagcctagtg agaccatggg cctgggagct gggctgggag 250
cctctggctc aggccttccc agcgaagaga atgaagagtc tcggattctg 300
cagccaccac agtacttctg ggaagaggag gaagagctga atgactcaag 350
tctggacctg ggaccactg cagattatgt tttcctgac ttaactgaga 400
aggcaggttc cattgaagac actagccagg ctcaagagct gccaaacctc 450
ccctctccct tgcccaagat gaatctgggt gagcctccct ggcatatgcc 500
tcccagagag gaggaagaag aggaagagga agaggaggag agggagaagg 550
aagaggtaga gaaacaagag gaggaggaag aggaggagct gctccctgtg 600
aatggatccc aagaagaagc caagcctcag gtccgtgact tttctctcac 650
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 cccgccttgg ccccgcttcc ccgcccctga accccggccc cgcgggcggc 2100
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 cgccgggccc agcaaaa 2167

<210> 160

<211> 605

<212> PRT

<213> Homo Sapien

<400> 160

Met	Gly	Arg	Leu	Leu	Arg	Ala	Ala	Arg	Leu	Pro	Pro	Leu	Leu	Ser
1				5					10					15
Pro	Leu	Leu	Leu	Leu	Leu	Val	Gly	Gly	Ala	Phe	Leu	Gly	Ala	Cys
				20					25					30
Val	Ala	Gly	Ser	Asp	Glu	Pro	Gly	Pro	Glu	Gly	Leu	Thr	Ser	Thr
				35					40					45
Ser	Leu	Leu	Asp	Leu	Leu	Leu	Pro	Thr	Gly	Leu	Glu	Pro	Leu	Asp
				50					55					60
Ser	Glu	Glu	Pro	Ser	Glu	Thr	Met	Gly	Leu	Gly	Ala	Gly	Leu	Gly
				65					70					75
Ala	Ser	Gly	Ser	Gly	Phe	Pro	Ser	Glu	Glu	Asn	Glu	Glu	Ser	Arg
				80					85					90
Ile	Leu	Gln	Pro	Pro	Gln	Tyr	Phe	Trp	Glu	Glu	Glu	Glu	Glu	Leu
				95					100					105

Asn	Asp	Ser	Ser	Leu	Asp	Leu	Gly	Pro	Thr	Ala	Asp	Tyr	Val	Phe	110	115	120
Pro	Asp	Leu	Thr	Glu	Lys	Ala	Gly	Ser	Ile	Glu	Asp	Thr	Ser	Gln	125	130	135
Ala	Gln	Glu	Leu	Pro	Asn	Leu	Pro	Ser	Pro	Leu	Pro	Lys	Met	Asn	140	145	150
Leu	Val	Glu	Pro	Pro	Trp	His	Met	Pro	Pro	Arg	Glu	Glu	Glu	Glu	155	160	165
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Arg	Glu	Lys	Glu	Glu	Val	Glu	Lys	170	175	180
Gln	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Leu	Leu	Pro	Val	Asn	Gly	Ser	185	190	195
Gln	Glu	Glu	Ala	Lys	Pro	Gln	Val	Arg	Asp	Phe	Ser	Leu	Thr	Ser	200	205	210
Ser	Ser	Gln	Thr	Pro	Gly	Ala	Thr	Lys	Ser	Arg	His	Glu	Asp	Ser	215	220	225
Gly	Asp	Gln	Ala	Ser	Ser	Gly	Val	Glu	Val	Glu	Ser	Ser	Met	Gly	230	235	240
Pro	Ser	Leu	Leu	Leu	Pro	Ser	Val	Thr	Pro	Thr	Thr	Val	Thr	Pro	245	250	255
Gly	Asp	Gln	Asp	Ser	Thr	Ser	Gln	Glu	Ala	Glu	Ala	Thr	Val	Leu	260	265	270
Pro	Ala	Ala	Gly	Leu	Gly	Val	Glu	Phe	Glu	Ala	Pro	Gln	Glu	Ala	275	280	285
Ser	Glu	Glu	Ala	Thr	Ala	Gly	Ala	Ala	Gly	Leu	Ser	Gly	Gln	His	290	295	300
Glu	Glu	Val	Pro	Ala	Leu	Pro	Ser	Phe	Pro	Gln	Thr	Thr	Ala	Pro	305	310	315
Ser	Gly	Ala	Glu	His	Pro	Asp	Glu	Asp	Pro	Leu	Gly	Ser	Arg	Thr	320	325	330
Ser	Ala	Ser	Ser	Pro	Leu	Ala	Pro	Gly	Asp	Met	Glu	Leu	Thr	Pro	335	340	345
Ser	Ser	Ala	Thr	Leu	Gly	Gln	Glu	Asp	Leu	Asn	Gln	Gln	Leu	Leu	350	355	360
Glu	Gly	Gln	Ala	Ala	Glu	Ala	Gln	Ser	Arg	Ile	Pro	Trp	Asp	Ser	365	370	375
Thr	Gln	Val	Ile	Cys	Lys	Asp	Trp	Ser	Asn	Leu	Ala	Gly	Lys	Asn	380	385	390
Tyr	Ile	Ile	Leu	Asn	Met	Thr	Glu	Asn	Ile	Asp	Cys	Glu	Val	Phe			

	395		400		405
Arg Gln His Arg Gly Pro Gln Leu Leu Ala Leu Val Glu Glu Val	410		415		420
Leu Pro Arg His Gly Ser Gly His His Gly Ala Trp His Ile Ser	425		430		435
Leu Ser Lys Pro Ser Glu Lys Glu Gln His Leu Leu Met Thr Leu	440		445		450
Val Gly Glu Gln Gly Val Val Pro Thr Gln Asp Val Leu Ser Met	455		460		465
Leu Gly Asp Ile Arg Arg Ser Leu Glu Glu Ile Gly Ile Gln Asn	470		475		480
Tyr Ser Thr Thr Ser Ser Cys Gln Ala Arg Ala Ser Gln Val Arg	485		490		495
Ser Asp Tyr Gly Thr Leu Phe Val Val Leu Val Val Ile Gly Ala	500		505		510
Ile Cys Ile Ile Ile Ile Ala Leu Gly Leu Leu Tyr Asn Cys Trp	515		520		525
Gln Arg Arg Leu Pro Lys Leu Lys His Val Ser His Gly Glu Glu	530		535		540
Leu Arg Phe Val Glu Asn Gly Cys His Asp Asn Pro Thr Leu Asp	545		550		555
Val Ala Ser Asp Ser Gln Ser Glu Met Gln Glu Lys His Pro Ser	560		565		570
Leu Asn Gly Gly Gly Ala Leu Asn Gly Pro Gly Ser Trp Gly Ala	575		580		585
Leu Met Gly Gly Lys Arg Asp Pro Glu Asp Ser Asp Val Phe Glu	590		595		600
Glu Asp Thr His Leu	605				

<210> 161
 <211> 1376
 <212> DNA
 <213> Homo Sapien

<400> 161
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 gcctgaactg cgggggtctct atcgcaactgc taggggttct gctgctgggt 150
 gcggcgcgcc tgccgcgcgg ggcagaagct tttgagattg ctctgccacg 200

	20	25	30
Glu Ile Ala Leu Pro Arg Glu Ser Asn	Ile Thr Val Leu Ile Lys		
35	40	45	
Leu Gly Thr Pro Thr Leu Leu Ala Lys	Pro Cys Tyr Ile Val Ile		
50	55	60	
Ser Lys Arg His Ile Thr Met Leu Ser	Ile Lys Ser Gly Glu Arg		
65	70	75	
Ile Val Phe Thr Phe Ser Cys Gln Ser	Pro Glu Asn His Phe Val		
80	85	90	
Ile Glu Ile Gln Lys Asn Ile Asp Cys	Met Ser Gly Pro Cys Pro		
95	100	105	
Phe Gly Glu Val Gln Leu Gln Pro Ser	Thr Ser Leu Leu Pro Thr		
110	115	120	
Leu Asn Arg Thr Phe Ile Trp Asp Val	Lys Ala His Lys Ser Ile		
125	130	135	
Gly Leu Glu Leu Gln Phe Ser Ile Pro	Arg Leu Arg Gln Ile Gly		
140	145	150	
Pro Gly Glu Ser Cys Pro Asp Gly Val	Thr His Ser Ile Ser Gly		
155	160	165	
Arg Ile Asp Ala Thr Val Val Arg Ile	Gly Thr Phe Cys Ser Asn		
170	175	180	
Gly Thr Val Ser Arg Ile Lys Met Gln	Glu Gly Val Lys Met Ala		
185	190	195	
Leu His Leu Pro Trp Phe His Pro Arg	Asn Val Ser Gly Phe Ser		
200	205	210	
Ile Ala Asn Arg Ser Ser Ile Lys Arg	Leu Cys Ile Ile Glu Ser		
215	220	225	
Val Phe Glu Gly Glu Gly Ser Ala Thr	Leu Met Ser Ala Asn Tyr		
230	235	240	
Pro Glu Gly Phe Pro Glu Asp Glu Leu	Met Thr Trp Gln Phe Val		
245	250	255	
Val Pro Ala His Leu Arg Ala Ser Val	Ser Phe Leu Asn Phe Asn		
260	265	270	
Leu Ser Asn Cys Glu Arg Lys Glu Glu	Arg Val Glu Tyr Tyr Ile		
275	280	285	
Pro Gly Ser Thr Thr Asn Pro Glu Val	Phe Lys Leu Glu Asp Lys		
290	295	300	
Gln Pro Gly Asn Met Ala Gly Asn Phe	Asn Leu Ser Leu Gln Gly		
305	310	315	

Cys Asp Gln Asp Ala Gln Ser Pro Gly Ile Leu Arg Leu Gln Phe
 320 325 330

Gln Val Leu Val Gln His Pro Gln Asn Glu Ser Ser Glu
 335 340

<210> 163
 <211> 1968
 <212> DNA
 <213> Homo Sapien

<400> 163
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 ggttactagc ttctcccttg gccttgagac ccacacgatg gcctgctgg 200
 ctctggccag tgccgtcccc tctgccctgc tggccctggc tgtcttcagg 250
 gtgcccgcct gggcctgtct cctctgcttc acaacctact ctgagcgcct 300
 ccgcatctgc cagatgtttg ttgggatgcg gagccccaag cttgaagagt 350
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tcccagcaac ctccaacca ggaggatgtt ctttcgatgg tactgcagtg 1850
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aaataaagaa tatatttcaa ctctaaaaaa aaaaaaaaaa aaaaaaaaaa 1950
aaaaaaaaaa aaaaaaaaaa 1968

<210> 164
<211> 243
<212> PRT
<213> Homo Sapien

<400> 164
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Ala Leu Ala Val Phe Arg Val Pro Ala Trp Ala Cys Leu Leu Cys
20 25 30
Phe Thr Thr Tyr Ser Glu Arg Leu Arg Ile Cys Gln Met Phe Val
35 40 45
Gly Met Arg Ser Pro Lys Leu Glu Glu Cys Glu Glu Ala Phe Thr
50 55 60
Ala Ala Phe Gln Gly Leu Ser Asp Thr Glu Ile Ser Glu Glu Thr
65 70 75
Ile His Thr Ser Ser Val Ser Trp Gly Arg Cys Arg Gly Arg Ala
80 85 90

Gly	Glu	Ala	Gln	Arg	Val	Arg	Leu	Arg	Asp	Arg	Gln	Arg	Glu	Thr
				95					100					105
Val	Arg	Gly	Glu	Arg	Leu	Lys	Asp	His	Glu	Asn	Asn	Arg	Asp	Leu
				110					115					120
Gly	Thr	Glu	Arg	His	Arg	Gln	Gly	Lys	Thr	Ala	Gly	Gln	Arg	Leu
				125					130					135
Arg	Glu	Gly	Arg	Met	Glu	Ser	Gln	Arg	Gly	Glu	Asp	Gly	Asp	Ser
				140					145					150
Glu	Arg	Gly	Glu	Asp	Gly	Asp	Ser	Glu	Arg	Glu	Glu	Asp	Gly	Asp
				155					160					165
Ser	Glu	Gly	Lys	Met	Glu	Thr	Gln	Glu	Tyr	Gly	Glu	Ser	Glu	Arg
				170					175					180
Gly	Gly	Trp	Thr	Leu	Arg	Gly	Gly	Trp	Arg	Val	Arg	Arg	Met	Glu
				185					190					195
Thr	His	Arg	Lys	Gly	Arg	Met	Glu	Ser	Gln	Glu	Arg	Leu	Glu	Thr
				200					205					210
Gly	Glu	Gly	Ile	Glu	Thr	Gln	Lys	Gly	Glu	Asp	Gly	Asp	Ser	Glu
				215					220					225
Gly	Gly	Arg	Trp	Arg	Leu	Lys	Glu	Asp	Gly	Asn	Pro	Glu	Arg	Gly
				230					235					240

Gly Gln Arg

<210> 165
 <211> 1941
 <212> DNA
 <213> Homo Sapien

<400> 165
 cagaatcgca gattgccagc ccttttcccg acccctacgg aaagacgagt 50
 ccagggggccg tcctggcgag gtcaaaacat ttagtctggt cttttcagcg 100
 tggaccctgc cagcagccag gccatggagc tctctgatgt caccctcatt 150
 gaggggtgtgg gtaatgaggt gatgggtggtg gcaggtgtgg tgggtgctgat 200
 tctagccttg gtccctagctt ggctctctac ctacgtagca gacagcggta 250
 gcaaccagct cctggggcgt attgtgtcag caggcgacac atccgtcctc 300
 cacctggggc atgtggacca cctggtggca ggccaaggca accccgagcc 350
 aactgaactc ccccatccat cagagggtaa tgatgagaag gctgaagagg 400
 cgggtgaagg tcggggagac tccactgggg aggetggagc tgggggtggt 450
 gttgagccca gccttgagca tctccttgac atccaaggcc tgcccaaaag 500

acaagcaggt gcaggcagca gcagtccaga ggccccctg agatctgagg 550
atagcacctg cctccctccc agccctggcc tcatcactgt gcggctcaaa 600
ttcctcaatg ataccgagga gctggctgtg gctaggccag aggataccgt 650
gggtgccctg aagagcaa atcttccctgg acaagaaagc cagatgaaac 700
tgatctacca gggccgcctg ctacaagacc cagcccgcac actgcgttct 750
ctgaacatta ccgacaactg tgtgattcac tgccaccgct cccccccagg 800
gtcagctgtt ccaggccctt cagcctcctt ggccccctcg gccactgagc 850
caccagcct tggtgtcaat gtgggcagcc tcatgggtgcc tgtctttgtg 900
gtgctgttgg gtgtggtctg gtacttccga atcaattacc gccaattctt 950
cacagcacct gccactgtct ccctgggtggg agtcaccgtc ttcttcagct 1000
tcctagtatt tgggatgtat ggacgataag gacataggaa gaaaatgaaa 1050
ggcatggtct ttctccttta tggcctcccc acttttctctg gccagagctg 1100
ggcccaaggg ccggggaggg aggggtggaa aggatgtgat ggaaatctcc 1150
tccataggac acaggaggca agtatgcggc ctccccttct catccacagg 1200
agtacagatg tccctcccgt gcgagcacia ctcaggtaga aatgaggatg 1250
tcattcttct tcaattttag ggtcctctga aggagttaa agctgctggc 1300
caagctcagt ggggagcctg ggctctgaga ttccctccca cctgtggttc 1350
tgactcttcc cagtgtcctg catgtctgcc cccagcacc agggctgcct 1400
gcaagggcag ctcagcatgg cccagcaca actccgtagg gagcctggag 1450
tatccttcca tttctcagcc aaatactcat cttttgagac tgaaatcaca 1500
ctggcgggaa tgaagattgt gccagccttc tcttatgggc acctagccgc 1550
cttcaccttc ttctctacc ccttagcagg aataggggtgt cctcccttct 1600
ttcaaagcac tttgcttgca ttttatttta tttttttaag agtccttcat 1650
agagctcagt caggaagggg atggggcacc aagccaagcc cccagcattg 1700
ggagcggcca ggccacagct gctgctccc tagtcctcag gctgtaagca 1750
agagacagca ctggcccttg gccagcgtcc taccctgccc aactccaagg 1800
actgggtatg gatcgctggg ccctaggctc ttgcttctgg ggctattgga 1850
gggtcagtgt ctgtgactga ataaagttcc attttgtgga aaaaaaaaaa 1900
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 1941

<210> 166
 <211> 301
 <212> PRT
 <213> Homo Sapien

<400> 166
 Met Glu Leu Ser Asp Val Thr Leu Ile Glu Gly Val Gly Asn Glu
 1 5 10 15
 Val Met Val Val Ala Gly Val Val Val Leu Ile Leu Ala Leu Val
 20 25 30
 Leu Ala Trp Leu Ser Thr Tyr Val Ala Asp Ser Gly Ser Asn Gln
 35 40 45
 Leu Leu Gly Ala Ile Val Ser Ala Gly Asp Thr Ser Val Leu His
 50 55 60
 Leu Gly His Val Asp His Leu Val Ala Gly Gln Gly Asn Pro Glu
 65 70 75
 Pro Thr Glu Leu Pro His Pro Ser Glu Gly Asn Asp Glu Lys Ala
 80 85 90
 Glu Glu Ala Gly Glu Gly Arg Gly Asp Ser Thr Gly Glu Ala Gly
 95 100 105
 Ala Gly Gly Gly Val Glu Pro Ser Leu Glu His Leu Leu Asp Ile
 110 115 120
 Gln Gly Leu Pro Lys Arg Gln Ala Gly Ala Gly Ser Ser Ser Pro
 125 130 135
 Glu Ala Pro Leu Arg Ser Glu Asp Ser Thr Cys Leu Pro Pro Ser
 140 145 150
 Pro Gly Leu Ile Thr Val Arg Leu Lys Phe Leu Asn Asp Thr Glu
 155 160 165
 Glu Leu Ala Val Ala Arg Pro Glu Asp Thr Val Gly Ala Leu Lys
 170 175 180
 Ser Lys Tyr Phe Pro Gly Gln Glu Ser Gln Met Lys Leu Ile Tyr
 185 190 195
 Gln Gly Arg Leu Leu Gln Asp Pro Ala Arg Thr Leu Arg Ser Leu
 200 205 210
 Asn Ile Thr Asp Asn Cys Val Ile His Cys His Arg Ser Pro Pro
 215 220 225
 Gly Ser Ala Val Pro Gly Pro Ser Ala Ser Leu Ala Pro Ser Ala
 230 235 240
 Thr Glu Pro Pro Ser Leu Gly Val Asn Val Gly Ser Leu Met Val
 245 250 255
 Pro Val Phe Val Val Leu Leu Gly Val Val Trp Tyr Phe Arg Ile

	260		265		270
Asn Tyr Arg Gln Phe Phe Thr Ala Pro		Ala Thr Val Ser Leu Val			
	275		280		285
Gly Val Thr Val Phe Phe Ser Phe Leu		Val Phe Gly Met Tyr Gly			
	290		295		300

Arg

<210> 167
 <211> 3323
 <212> DNA
 <213> Homo Sapien

<400> 167
 ggcggtgtg tgcgcccga gccgaagcgc gcaggcccgt cccggtggcc 50
 ggggagcggg cgggtggggg cgccatgtgg ttcattgtacc tgctgagctg 100
 gctgtcgctc ttcattccagg tggccttcat cacgctggct gtcgaggctg 150
 gactctatta cctggcagaa ctgatagaag aatacacagt ggccaccagc 200
 aggatcataa aatacatgat ctggttctcc accgctgtac tgattggcct 250
 ctacgtcttt gagcgcttcc ccaccagcat gattggagtg ggcctattca 300
 ccaacctcgt ctactttggc ctccctccaga ccttcccctt catcatgctg 350
 acctcgcta acttcatcct gtcgtgtgga ctagtggtgg tgaatcatta 400
 cctagcattt cagttttttg cagaagaata ttatcccttc tcagagggtcc 450
 tggcctatth cactttctgc ctgtggataa ttccgtttgc gttttttgtg 500
 tcactttcgg ccggggagaa cgtcctgccc tctaccatgc agccaggaga 550
 tgatgtcgtc tccaattatt tcaccaaagg caagcggggc aaacgcttag 600
 ggatcctggt tgtcttctcc ttcattcaaag aggcattct acccagtcgt 650
 cagaagatat actgaccccc atgcaggcag gatgtggggg gcaagatcag 700
 gagagtcagg cccctggggc tctatgccag gtggggacca gaagtcggga 750
 aggcacctac cacctgccct ggctttcttc ccctcaactc tggagcccca 800
 tccccaccct ccttgggggg ctcagcttgg ctcagatctg atgcttcaag 850
 aggctgtaac ctcagagggc accaaggagg gtggcagagc ctgcttagcc 900
 aggaggccga ggtccctcag tcctcccctg tccttccaa ggtgggtcag 950
 gaggttctgg ccccgctggg gcaggcaggg cagggtctgt gaagcttaag 1000
 agcagatggt gacaagttct ctgggcaggt ggccatgggg aggggcatg 1050

gcttggcatg tccaacagaa atagtttttg ctgttgaacg gtgatttctg 1100
tccaagtgca gatttccggt tgaataaagc ttcgcttcta ggtggcactg 1150
tttgccttaa taccctgaca gttcatcttc ctttcttcct gctaaccctc 1200
tgctctggac tggactcact tttctgctcc agggactcct tttctgggtt 1250
tgggtcttgc ccttcccaag ggactgttct tgtggccctt aatgggaagg 1300
gggcaggggt gaggagctga gcctgctcaa ggagtgggaa gtggggctat 1350
aggcagcctc tctgatgcac tctcttccat ctctttcccc aaggctccgt 1400
gactgtcaaa ctgggagtag gagaggggac aatttaggac tgggctagat 1450
tttcagaaga acatctacaa taccctatct ataatcttc ctctgggaaa 1500
aggagtgggt tctggctgaa tactatctta ggctcaagga gaaacaaaat 1550
aaaaattagc ttccaggcag cctgttttta aagaaatggg actaatggga 1600
gaagctgttt gtcactctaa gagcatccaa gccctggccc gtctgtgcac 1650
tcttggctcc tggggagata tatctgcctt ctaagaaggc aggccaggtc 1700
ttgggcacag acctgcattt gttgacctg cactccaact atagtgcctt 1750
gcaagtgtc aacagtacat attggaatga agtccctatg agagccattt 1800
ctggccatgt tctatacctc aaagtgaggc tggcaggtac agagatgaac 1850
tgtacacatg tgatacattt aagccactgg aaaaaccctt gtgcttgaaa 1900
atatttcctc tatatcatgc ctggagttcc atcatagccc ttcatttcct 1950
tggttttagc atttaccttc tcttaagaat accagcttcc ccctttccct 2000
gagaggaaga gcacatgttg gtctcctctt agtgtgaacg agattgccag 2050
gcccttttct cctatgcaca ccaggataga caaggcaggg gatactggca 2100
gcctgcatca tcttccattt gggctgacag ctggccctac tttcctccct 2150
ctgctgcttg gtccctcacc ttgatgatgt ggcttcgccc cctccactct 2200
actgccagtg ttctcccagg ggttgctaaa tccagcagac ccctttcctg 2250
tcttactaga tctgggcagc atttgacatg gctgatcacc ccttgcttct 2300
tggatggcac ttccctggca cctctgtggc tagttgtcct acctccctgg 2350
ctgttccttt caggcttccg tgcaggcttc tccacttgcc catgcacagt 2400
agggcttttc agggttctgc tgtgggctcc ctagggaagc ccatccatct 2450
ggatggtttc aaggatggtg aggaatttag agttgacctc cagccccaac 2500

atccttcttg atcacctgaa ccacagtttt gctgccctct aggtgcacag 2550
 acaattcagg tccatggccc agatgggtact tgctgtcttc tgcaaacctg 2600
 ccccttcttg gtacttccct tgaccccgag atcactcagg agccagacag 2650
 gaaacttatt ctattcctgt tttctctttc tgcccaccac atccaatctc 2700
 tcaaaaacggc caggtctacc ttaacatctc ttgatttgag ccactcccac 2750
 tgtcatcagc tttcacctgg attatcgtga cagcctccta ctgcttctct 2800
 atcatgtggc cagagctatc ttcctaaaat gcattgcata gttgatcaag 2850
 tcaactctctg gcctaaaacc ttccttggct ccctgctgcc ctcaggataa 2900
 agtctggacc cctcagcatg gcttgtgaga ctcatgggtg ctttgtccct 2950
 gctcacctct ctggtctcat cacttgcctt cttgcattct ggggccagc 3000
 ctctgtatc cagagatgca gtggctctcc attgccactc tgattcctcc 3050
 tttcttttgg tcacagagaa aggggtacttt ctctgtcaaa tctcaactta 3100
 gacttgactt cctccaagga gctttggcta tactctctcc tcccgaaccc 3150
 caccctggca tactacacag atcactctgg gctcacttgc ctgcctaata 3200
 gtcactctcc cagtagactg taagctcctt gagggcaagg attgtgttgg 3250
 aatttttgta ttaacagtgc ctggcttggc gcctggcacc tagaaagcac 3300
 tcaataaatg tttgtttaat gaa 3323

<210> 168
 <211> 196
 <212> PRT
 <213> Homo Sapien

<400> 168
 Met Trp Phe Met Tyr Leu Leu Ser Trp Leu Ser Leu Phe Ile Gln
 1 5 10 15
 Val Ala Phe Ile Thr Leu Ala Val Ala Ala Gly Leu Tyr Tyr Leu
 20 25 30
 Ala Glu Leu Ile Glu Glu Tyr Thr Val Ala Thr Ser Arg Ile Ile
 35 40 45
 Lys Tyr Met Ile Trp Phe Ser Thr Ala Val Leu Ile Gly Leu Tyr
 50 55 60
 Val Phe Glu Arg Phe Pro Thr Ser Met Ile Gly Val Gly Leu Phe
 65 70 75
 Thr Asn Leu Val Tyr Phe Gly Leu Leu Gln Thr Phe Pro Phe Ile
 80 85 90

Met	Leu	Thr	Ser	Pro	Asn	Phe	Ile	Leu	Ser	Cys	Gly	Leu	Val	Val
				95					100					105
Val	Asn	His	Tyr	Leu	Ala	Phe	Gln	Phe	Phe	Ala	Glu	Glu	Tyr	Tyr
				110					115					120
Pro	Phe	Ser	Glu	Val	Leu	Ala	Tyr	Phe	Thr	Phe	Cys	Leu	Trp	Ile
				125					130					135
Ile	Pro	Phe	Ala	Phe	Phe	Val	Ser	Leu	Ser	Ala	Gly	Glu	Asn	Val
				140					145					150
Leu	Pro	Ser	Thr	Met	Gln	Pro	Gly	Asp	Asp	Val	Val	Ser	Asn	Tyr
				155					160					165
Phe	Thr	Lys	Gly	Lys	Arg	Gly	Lys	Arg	Leu	Gly	Ile	Leu	Val	Val
				170					175					180
Phe	Ser	Phe	Ile	Lys	Glu	Ala	Ile	Leu	Pro	Ser	Arg	Gln	Lys	Ile
				185					190					195

Tyr

<210> 169
 <211> 1664
 <212> DNA
 <213> Homo Sapien

<400> 169
 caaagcccta ccctcaccat tcaccagggtc ctgtgggaag agcagcgtgg 50
 aggtgggctg aggttagaag gtgcagagcg tggaagaaga ttgtgagctg 100
 agtattggac atctgttctt gaatagtccc tgggcctgcc ataggaaagg 150
 aagttctcca gggttacagt tcttatccgc gtgaatacac atggctctgt 200
 tacgaaaaat taatcagggtg ctgctgttcc ttctgatcgt gaccctctgt 250
 gtgattctgt ataagaaagt tcataagggg actgtgcca agaatgacgc 300
 agatgatgaa tccgagactc ctgaagaact ggaagaagag attcctgtgg 350
 tgatttgtgc tgcagcaggg aggatgggtg ccactatggc tgccatcaat 400
 agcatctaca gcaacactga cgccaacatc ttgttctatg tagtgggact 450
 ccggaatact ctgactcgaa tacgaaaatg gattgaacat tccaaactga 500
 gagaaataaa ctttaaaatc gtggaattca acccgatggg cctcaaaggg 550
 aagatcagac cagactcatc gaggcctgaa ttgctccagc ctctgaactt 600
 tgttcgattt tatctccctc tacttatcca ccaacacgag aaagtcattt 650
 atttgacga tgatgtaatt gtacaagggtg atatccaaga actgtatgac 700

accaccttgg ccctggggcca cgcggcggct ttctcagatg actgcgattt 750
 gccctctgct caggacataa acagactcgt gggacttcag aacacatata 800
 tgggctatct ggactaccgg aagaaggcca tcaaggacct tggcatcagc 850
 cccagcacct gctctttcaa tcctgggtgtg attgttgccca acatgacaga 900
 atggaagcac cagcgcacat ccaagcaatt ggagaaatgg atgcaaaaga 950
 atgtggagga aaacctctat agcagctccc tgggaggagg ggtggccacc 1000
 tccccaatgc tgattgtggt tcatgggaaa tattccacaa ttaaccccct 1050
 gtggcacata aggcacctgg gctggaatcc agatgccaga tattcggagc 1100
 attttctgca ggaagctaaa ttactccact ggaatggaag acataaacct 1150
 tgggacttcc ctagtgttca caacgactta tgggaaagct ggtttgttcc 1200
 tgaccctgca gggatattta aactcaatca ccatagctga tataactcta 1250
 cccttaaaat attccctgta tagaaatgtg gaattgtccc tttgtagcca 1300
 actataacat tgttctttat gaatattacc tttgatacat atgatccaca 1350
 atataaaaac caaaaactac tgtgtgcaaa ttataccttg gaccatatag 1400
 gcattgatta acttctttta gtacatgtga taactatgga aatcaagatt 1450
 atgtgactga aaaacataaa ggaagagacc catctagata acagcaatca 1500
 acctgcttaa ttctgaatga caattatatt cacaattttt taaaacttct 1550
 acatgtattt ttcacatgaa gatctcctta acagggttgcc aaccttttct 1600
 tttataaaaac tattacattt aaaatatgga cgtctgaaaa ataaaatatt 1650
 catcattttt aaaa 1664

<210> 170
 <211> 349
 <212> PRT
 <213> Homo Sapien

<400> 170
 Met Ala Leu Leu Arg Lys Ile Asn Gln Val Leu Leu Phe Leu Leu
 1 5 10 15
 Ile Val Thr Leu Cys Val Ile Leu Tyr Lys Lys Val His Lys Gly
 20 25 30
 Thr Val Pro Lys Asn Asp Ala Asp Asp Glu Ser Glu Thr Pro Glu
 35 40 45
 Glu Leu Glu Glu Glu Ile Pro Val Val Ile Cys Ala Ala Ala Gly
 50 55 60

Arg	Met	Gly	Ala	Thr	Met	Ala	Ala	Ile	Asn	Ser	Ile	Tyr	Ser	Asn	
				65					70					75	
Thr	Asp	Ala	Asn	Ile	Leu	Phe	Tyr	Val	Val	Gly	Leu	Arg	Asn	Thr	
				80					85					90	
Leu	Thr	Arg	Ile	Arg	Lys	Trp	Ile	Glu	His	Ser	Lys	Leu	Arg	Glu	
				95					100					105	
Ile	Asn	Phe	Lys	Ile	Val	Glu	Phe	Asn	Pro	Met	Val	Leu	Lys	Gly	
				110					115					120	
Lys	Ile	Arg	Pro	Asp	Ser	Ser	Arg	Pro	Glu	Leu	Leu	Gln	Pro	Leu	
				125					130					135	
Asn	Phe	Val	Arg	Phe	Tyr	Leu	Pro	Leu	Leu	Ile	His	Gln	His	Glu	
				140					145					150	
Lys	Val	Ile	Tyr	Leu	Asp	Asp	Asp	Val	Ile	Val	Gln	Gly	Asp	Ile	
				155					160					165	
Gln	Glu	Leu	Tyr	Asp	Thr	Thr	Leu	Ala	Leu	Gly	His	Ala	Ala	Ala	
				170					175					180	
Phe	Ser	Asp	Asp	Cys	Asp	Leu	Pro	Ser	Ala	Gln	Asp	Ile	Asn	Arg	
				185					190					195	
Leu	Val	Gly	Leu	Gln	Asn	Thr	Tyr	Met	Gly	Tyr	Leu	Asp	Tyr	Arg	
				200					205					210	
Lys	Lys	Ala	Ile	Lys	Asp	Leu	Gly	Ile	Ser	Pro	Ser	Thr	Cys	Ser	
				215					220					225	
Phe	Asn	Pro	Gly	Val	Ile	Val	Ala	Asn	Met	Thr	Glu	Trp	Lys	His	
				230					235					240	
Gln	Arg	Ile	Thr	Lys	Gln	Leu	Glu	Lys	Trp	Met	Gln	Lys	Asn	Val	
				245					250					255	
Glu	Glu	Asn	Leu	Tyr	Ser	Ser	Ser	Leu	Gly	Gly	Gly	Val	Ala	Thr	
				260					265					270	
Ser	Pro	Met	Leu	Ile	Val	Phe	His	Gly	Lys	Tyr	Ser	Thr	Ile	Asn	
				275					280					285	
Pro	Leu	Trp	His	Ile	Arg	His	Leu	Gly	Trp	Asn	Pro	Asp	Ala	Arg	
				290					295					300	
Tyr	Ser	Glu	His	Phe	Leu	Gln	Glu	Ala	Lys	Leu	Leu	His	Trp	Asn	
				305					310					315	
Gly	Arg	His	Lys	Pro	Trp	Asp	Phe	Pro	Ser	Val	His	Asn	Asp	Leu	
				320					325					330	
Trp	Glu	Ser	Trp	Phe	Val	Pro	Asp	Pro	Ala	Gly	Ile	Phe	Lys	Leu	
				335					340					345	
Asn	His	His	Ser												

<210> 171
 <211> 756
 <212> DNA
 <213> Homo Sapien

<400> 171
 gccagaggct gcagctggag cccagagccc aagatggagc cccagctggg 50
 gcctgaggct gccgccctcc gccctggctg gctggccctg ctgctgtggg 100
 tctcagccct gagctgttct ttctccttgc cagcttcttc cttttcttct 150
 ctggtgcccc aagtcagaac cagctacaat tttggaagga ctttcctcgg 200
 tcttgataaa tgcaatgcct gcatcgggac atctatttgc aagaagttct 250
 ttaaagaaga aataagatct gacaactggc tggcttccca ccttggaactg 300
 cctcccgatt ccttgctttc ttatcctgca aattactcag atgattccaa 350
 aatctggcgc cctgtggaga tcttttagact ggtcagcaaa tatcaaaacg 400
 agatctcaga caggagaatc tgtgcctctg catcagcccc aaagacctgc 450
 agcattgagc gtgtcctgcg gaaaacagag aggttccaga aatggctgca 500
 ggccaagcgc ctcacgccgg acctggtgca ggactgtcac cagggccaga 550
 gagaactaaa gttcctgtgt atgctgagat aacaccagtg aaaaagcctg 600
 gcatggagcc cagcactgag aacttccaga aagtgttagc cttctcccaa 650
 ctgtgttata ccaaccacat tttcaaatag taatcattaa agaggcttct 700
 gcatcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 750
 aaaaaa 756

<210> 172
 <211> 182
 <212> PRT
 <213> Homo Sapien

<400> 172
 Met Glu Pro Gln Leu Gly Pro Glu Ala Ala Ala Leu Arg Pro Gly
 1 5 10 15
 Trp Leu Ala Leu Leu Leu Trp Val Ser Ala Leu Ser Cys Ser Phe
 20 25 30
 Ser Leu Pro Ala Ser Ser Leu Ser Ser Leu Val Pro Gln Val Arg
 35 40 45
 Thr Ser Tyr Asn Phe Gly Arg Thr Phe Leu Gly Leu Asp Lys Cys
 50 55 60
 Asn Ala Cys Ile Gly Thr Ser Ile Cys Lys Lys Phe Phe Lys Glu

gaactagaat gggaaattgc ccaggtggac cccaagaaga ccattcagat 700
 gggatctttc cggatcaatc cagatggcag ccagtcagtg gtggaggtgc 750
 cttatgcccc ctcagaggcc cacctcacag agctgctgga ggagatatgt 800
 gaccggatga aggagtatgg ggaacagatt gatccttcca cccatcgcaa 850
 gaactacgta cgtgtagtgg gccggaatgg agaatccagt gaactggacc 900
 tacaaggcat ccgaatcgac tcagatatta gcggcaccct caagtttgcg 950
 tgtgagagca ttgtggagga atacgaggat gaactcattg aattcttttc 1000
 ccgagaggct gacaatgtta aagacaaact ttgcagtaag cgaacagatc 1050
 tttgtgacca tgcctgcac atatcgcatg atgagctatg aaccactgga 1100
 gcagcccaca ctggcttgat ggatcacccc caggagggga aaatggtggc 1150
 aatgcctttt atatattatg tttttactga aattaactga aaaaatatga 1200
 aaccaaaaagt 1210

<210> 174
 <211> 182
 <212> PRT
 <213> Homo Sapien

<400> 174
 Met Lys Gly Trp Gly Trp Leu Ala Leu Leu Leu Gly Ala Leu Leu
 1 5 10 15
 Gly Thr Ala Trp Ala Arg Arg Ser Gln Asp Leu His Cys Gly Ala
 20 25 30
 Cys Arg Ala Leu Val Asp Glu Leu Glu Trp Glu Ile Ala Gln Val
 35 40 45
 Asp Pro Lys Lys Thr Ile Gln Met Gly Ser Phe Arg Ile Asn Pro
 50 55 60
 Asp Gly Ser Gln Ser Val Val Glu Val Pro Tyr Ala Arg Ser Glu
 65 70 75
 Ala His Leu Thr Glu Leu Leu Glu Glu Ile Cys Asp Arg Met Lys
 80 85 90
 Glu Tyr Gly Glu Gln Ile Asp Pro Ser Thr His Arg Lys Asn Tyr
 95 100 105
 Val Arg Val Val Gly Arg Asn Gly Glu Ser Ser Glu Leu Asp Leu
 110 115 120
 Gln Gly Ile Arg Ile Asp Ser Asp Ile Ser Gly Thr Leu Lys Phe
 125 130 135
 Ala Cys Glu Ser Ile Val Glu Glu Tyr Glu Asp Glu Leu Ile Glu

				140						145					150
Phe	Phe	Ser	Arg	Glu	Ala	Asp	Asn	Val	Lys	Asp	Lys	Leu	Cys	Ser	
				155					160					165	
Lys	Arg	Thr	Asp	Leu	Cys	Asp	His	Ala	Leu	His	Ile	Ser	His	Asp	
				170					175					180	

Glu Leu

<210> 175
 <211> 2027
 <212> DNA
 <213> Homo Sapien

<400> 175
 cgcagcgcgg cagtcctgat ggcccggcat gggttaccgc tgctgcccct 50
 gctgtcgctc ctggtcggcg cgtggctcaa gctaggaaat ggacaggcta 100
 ctagcatggg ccaactgcag ggtgggagat tcctgatggg aacaaattct 150
 ccagacagca gagatgggta agggcctgtg cgggaggcga cagtgaacc 200
 ctttgccatc gacatatttc ctgtcaccaa caaagatttc agggattttg 250
 tcaggagaaa aaagtatcgg acagaagctg agatgtttgg atggagcttt 300
 gtctttgagg actttgtctc tgatgagctg agaaacaaag ccaccagacc 350
 aatgaagtct gtactctggg ggcttccagt ggaaaaggca ttttggaggc 400
 agcctgcagg tcctggctct ggcatccgag agagactgga gcaccagtg 450
 ttacacgtga gctggaatga cggcgtgcc tactgtgctt ggcggggaaa 500
 acgactgccc acggaggaag agtgggagtt tgccgcccga gggggcttga 550
 aggggtcaagt ttacccatgg ggaactggg tccagccaaa ccgcaccaac 600
 ctgtggcagg gaaagttccc caaggagac aaagctgagg atggcttcca 650
 tggagtctcc ccagtgaatg ctttccccgc ccagaacaac tacgggctct 700
 atgacctcct ggggaacgtg tgggagtgga cagcatcacc gtaccaggct 750
 gctgagcagg acatgcgcgt cctccggggg gcatcctgga tcgacacagc 800
 tgatggctct gccaatcacc gggcccgggt caccaccagg atgggcaaca 850
 ctccagattc agcctcagac aacctcggtt tccgctgtgc tgcagacgca 900
 ggccggccgc caggggagct gtaagcagcc ggggtggtgac aaggagaaaa 950
 gccttctagg gtcactgtca ttccctggcc atgttgcaaa cagcgcaatt 1000
 ccaagctcga gagcttcagc ctcaggaaaag aacttcccct tcctgtctc 1050

ccatccctct gtggcaggcg cctctcacca gggcaggaga ggactcagcc 1100
tcctgtgttt tggagaaggg gcccaatgtg tgttgacgat ggctgggggc 1150
caggtgtttc tgtagaggg caagtattat tgacacagga ttgcaaacac 1200
acaaacagtt ggaacagagc actctgaaag gccatttttt aagcatttta 1250
aatctattc tctccccctt tctccctgga tgattcagga agctgacatt 1300
gtttcctcaa ggcagaattt tcctggttct gttttctcag ccagttgctg 1350
tggaaggaga atgctttctt tgtggcctca tctgtggttt cgtgtccctc 1400
tgaaggaaac tagtttccac tgtgtaacag gcagacatgt aactatttaa 1450
agcacagttc agtcctaaaa gggctctggga gaaccagatg atgtactagg 1500
tgaagcattg cattgtggga atcacaaagc aaatagtact ccagaaagac 1550
aaatatcaga agcttcctat tctttttttt tttttttttt tttttttgag 1600
acagggctct tctctgttgc ccaggctaga gtgcactggg gatcacggct 1650
cactctagcc ttgaattcct gggcccaagc aattctccca cctcagcctc 1700
ctgagtagct gggactacaa gtgtgcacca ccatgcctgg ctaatttttt 1750
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ctcctggcct caagcgatcc tcccacctcg acctcccaa gtgctgggat 1850
tacaggtgtg agccacctcg cctgggcccc cttctccata tgcctccaaa 1900
aacatgtccc tggagagtag cctgctccca cactgtcact ggatgtcatg 1950
gggccaataa aatctcctgc aattgtgtat ctcaaaaaaa aaaaaaaaaa 2000
aaaaaaaaaa aaaaaaaaaa aaaaaaa 2027

<210> 176
<211> 301
<212> PRT
<213> Homo Sapien

<400> 176
Met Ala Arg His Gly Leu Pro Leu Leu Pro Leu Leu Ser Leu Leu
1 5 10 15
Val Gly Ala Trp Leu Lys Leu Gly Asn Gly Gln Ala Thr Ser Met
20 25 30
Val Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro
35 40 45
Asp Ser Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys
50 55 60

Pro	Phe	Ala	Ile	Asp	Ile	Phe	Pro	Val	Thr	Asn	Lys	Asp	Phe	Arg	
				65					70					75	
Asp	Phe	Val	Arg	Glu	Lys	Lys	Tyr	Arg	Thr	Glu	Ala	Glu	Met	Phe	
				80					85					90	
Gly	Trp	Ser	Phe	Val	Phe	Glu	Asp	Phe	Val	Ser	Asp	Glu	Leu	Arg	
				95					100					105	
Asn	Lys	Ala	Thr	Gln	Pro	Met	Lys	Ser	Val	Leu	Trp	Trp	Leu	Pro	
				110					115					120	
Val	Glu	Lys	Ala	Phe	Trp	Arg	Gln	Pro	Ala	Gly	Pro	Gly	Ser	Gly	
				125					130					135	
Ile	Arg	Glu	Arg	Leu	Glu	His	Pro	Val	Leu	His	Val	Ser	Trp	Asn	
				140					145					150	
Asp	Ala	Arg	Ala	Tyr	Cys	Ala	Trp	Arg	Gly	Lys	Arg	Leu	Pro	Thr	
				155					160					165	
Glu	Glu	Glu	Trp	Glu	Phe	Ala	Ala	Arg	Gly	Gly	Leu	Lys	Gly	Gln	
				170					175					180	
Val	Tyr	Pro	Trp	Gly	Asn	Trp	Phe	Gln	Pro	Asn	Arg	Thr	Asn	Leu	
				185					190					195	
Trp	Gln	Gly	Lys	Phe	Pro	Lys	Gly	Asp	Lys	Ala	Glu	Asp	Gly	Phe	
				200					205					210	
His	Gly	Val	Ser	Pro	Val	Asn	Ala	Phe	Pro	Ala	Gln	Asn	Asn	Tyr	
				215					220					225	
Gly	Leu	Tyr	Asp	Leu	Leu	Gly	Asn	Val	Trp	Glu	Trp	Thr	Ala	Ser	
				230					235					240	
Pro	Tyr	Gln	Ala	Ala	Glu	Gln	Asp	Met	Arg	Val	Leu	Arg	Gly	Ala	
				245					250					255	
Ser	Trp	Ile	Asp	Thr	Ala	Asp	Gly	Ser	Ala	Asn	His	Arg	Ala	Arg	
				260					265					270	
Val	Thr	Thr	Arg	Met	Gly	Asn	Thr	Pro	Asp	Ser	Ala	Ser	Asp	Asn	
				275					280					285	
Leu	Gly	Phe	Arg	Cys	Ala	Ala	Asp	Ala	Gly	Arg	Pro	Pro	Gly	Glu	
				290					295					300	

Leu

<210> 177
 <211> 959
 <212> DNA
 <213> Homo Sapien

<400> 177
 gccttctcgc gcctgaccat gcaccctgc atcttcctgc tgggccacag 50

Thr	Ser	Ser	Arg	Arg	Lys	Arg	Asp	Leu	Asp	Gly	Ser	Glu	Asp	Trp	
				80					85					90	
Val	Tyr	Tyr	Arg	Ile	Ser	His	Glu	Glu	Lys	Asp	Leu	Phe	Phe	Asn	
				95					100					105	
Leu	Thr	Val	Asn	Gln	Gly	Phe	Leu	Ser	Asn	Ser	Tyr	Ile	Met	Glu	
				110					115					120	
Lys	Arg	Tyr	Gly	Asn	Leu	Ser	His	Val	Lys	Met	Met	Ala	Ser	Ser	
				125					130					135	
Ala	Pro	Leu	Cys	His	Leu	Ser	Gly	Thr	Val	Leu	Gln	Gln	Gly	Thr	
				140					145					150	
Arg	Val	Gly	Thr	Ala	Ala	Leu	Ser	Ala	Cys	His	Gly	Leu	Thr	Gly	
				155					160					165	
Phe	Phe	Gln	Leu	Pro	His	Gly	Asp	Phe	Phe	Ile	Glu	Pro	Val	Lys	
				170					175					180	
Lys	His	Pro	Leu	Val	Glu	Gly	Gly	Tyr	His	Pro	His	Ile	Val	Tyr	
				185					190					195	
Arg	Arg	Gln	Lys	Val	Pro	Glu	Thr	Lys	Glu	Pro	Thr	Cys	Gly	Leu	
				200					205					210	
Lys	Gly	Ile	Val	Thr	His	Met	Ser	Ser	Trp	Val	Glu	Glu	Ser	Val	
				215					220					225	

Leu Phe Phe Trp

<210> 179
 <211> 2134
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 2108
 <223> unknown base

<400> 179
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 aatttccttt tcttgccaat tctgatctga acagaaaatc caagaacagg 100
 gatatgtgtg gattacagtt ttctctgcct tgctacgac tgtttctggt 150
 tgttacctgt tatcttttat tattactcca caaagaaata cttggatggt 200
 cgtctgtttg tcagctctgc actgggagac aaattaactg ccgtaactta 250
 ggcctttcga gtattcctaa gaattttcct gaaagtacag tttttctgta 300
 tctgactggg aataatatat cttatataaa tgaaagtgaa ttaacaggac 350

ttcattctct tgtagcattg tatttggata attctaakat tctgtatgta 400
tatccaaaag cctttgttca attgagggcat ctatatcttc tatttctaaa 450
taataatttc atcaaacgct tagatcctgg aatattttaag ggacttttaa 500
atcttcgtaa tttatattta cagtataatc aggtatcttt tgttccgaga 550
ggagtattta atgatctagt ttcagttcag tacttaaatac taaaaggaa 600
tcgcctcact gtccttggga gtggtacctt tgttggatg gttgctcttc 650
ggatacttga tttatcaaac aataacattt tgaggatatac agaatacaggc 700
tttcaacatac ttgaaaacct tgcttgtttg tatttaggaa gtaataattt 750
aataaaagta ccatcaaatg cctttgaagt acttaaaagt cttagaagac 800
tttctttgtc tcataatcct attgaagcaa tacagccctt tgcattttaa 850
ggacttgcca atctggaata cctcctcctg aaaaattcaa gaattaggaa 900
tgttactagg gatgggttta gtggaattaa taatctttaa catttgatct 950
taagtcataa tgatttagag aatttaaatt ctgacacatt cagtttgta 1000
aagaatttaa tttaccttaa gttagataga aacagaataa ttagcattga 1050
taatgataca tttgaaaata tgggagcatc tttgaagatc cttaatctgt 1100
catttaataa tcttacagcc ttgcatccaa gggtccttaa gccgttgtct 1150
tcattgattc atcttcaggc aaattctaata ccttgggaat gtaactgcaa 1200
acttttgggc cttcgagact ggctagcatc ttcagccatt actctaaaca 1250
tctattgtca gaatcccca tccatgcgtg gcagagcatt acgttatatt 1300
aacattacaa attgtgttac atcttcaata aatgtatcca gagcttgggc 1350
tgttgtaaaa tctcctcata ttcatacaaa gactactgcg ctaatgatgg 1400
cctggcataa agtaaccaca aatggcagtc ctctggaaaa tactgagact 1450
gagaacatta ctttctggga acgaattcct acttcacctg ctggtagatt 1500
ttttcaagag aatgcctttg gtaatccatt agagactaca gcagtgttac 1550
ctgtgcaaata acaacttact acttctgtta ccttgaactt ggaaaaaac 1600
agtgtcttac cgaatgatgc tgcttcaatg tcagggaata catctctaata 1650
ttgtacacaa gaagttgaga agttgaatga ggcttttgac attttgctag 1700
cttttttcat cttagcttgt gttttaataca tttttttgat ctacaaagtt 1750
gttcagttta acaaaaaact aaaggcatca gaaaactcaa gggaaaatag 1800

acttgaatac tacagctttt atcagtcagc aaggtataat gtaactgcct 1850
 caatttgtaa cacttcccca aattctctag aaagtcctgg cttggagcag 1900
 attcgacttc ataaacaaat tggtcctgaa aatgaggcac aggtcattct 1950
 ttttgaacat tctgctttat aactcaacta aatattgtct ataagaaact 2000
 tcagtgccat ggacatgatt taaactgaaa cctccttata taattatata 2050
 ctttagttgg aaatataatg aattatatga ggtagcatt attaaaatat 2100
 gttttttntt aaaaaaaaaa aaaaaaaaaa aaaa 2134

<210> 180
 <211> 622
 <212> PRT
 <213> Homo Sapien

<400> 180

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Val	Val	Thr	Cys	Tyr	Leu	Leu	Leu	Leu	Leu	His	Lys	Glu	Ile	Leu
				20					25					30
Gly	Cys	Ser	Ser	Val	Cys	Gln	Leu	Cys	Thr	Gly	Arg	Gln	Ile	Asn
				35					40					45
Cys	Arg	Asn	Leu	Gly	Leu	Ser	Ser	Ile	Pro	Lys	Asn	Phe	Pro	Glu
				50					55					60
Ser	Thr	Val	Phe	Leu	Tyr	Leu	Thr	Gly	Asn	Asn	Ile	Ser	Tyr	Ile
				65					70					75
Asn	Glu	Ser	Glu	Leu	Thr	Gly	Leu	His	Ser	Leu	Val	Ala	Leu	Tyr
				80					85					90
Leu	Asp	Asn	Ser	Asn	Ile	Leu	Tyr	Val	Tyr	Pro	Lys	Ala	Phe	Val
				95					100					105
Gln	Leu	Arg	His	Leu	Tyr	Phe	Leu	Phe	Leu	Asn	Asn	Asn	Phe	Ile
				110					115					120
Lys	Arg	Leu	Asp	Pro	Gly	Ile	Phe	Lys	Gly	Leu	Leu	Asn	Leu	Arg
				125					130					135
Asn	Leu	Tyr	Leu	Gln	Tyr	Asn	Gln	Val	Ser	Phe	Val	Pro	Arg	Gly
				140					145					150
Val	Phe	Asn	Asp	Leu	Val	Ser	Val	Gln	Tyr	Leu	Asn	Leu	Gln	Arg
				155					160					165
Asn	Arg	Leu	Thr	Val	Leu	Gly	Ser	Gly	Thr	Phe	Val	Gly	Met	Val
				170					175					180
Ala	Leu	Arg	Ile	Leu	Asp	Leu	Ser	Asn	Asn	Asn	Ile	Leu	Arg	Ile
				185					190					195

Ser	Glu	Ser	Gly	Phe	Gln	His	Leu	Glu	Asn	Leu	Ala	Cys	Leu	Tyr
				200					205					210
Leu	Gly	Ser	Asn	Asn	Leu	Thr	Lys	Val	Pro	Ser	Asn	Ala	Phe	Glu
				215					220					225
Val	Leu	Lys	Ser	Leu	Arg	Arg	Leu	Ser	Leu	Ser	His	Asn	Pro	Ile
				230					235					240
Glu	Ala	Ile	Gln	Pro	Phe	Ala	Phe	Lys	Gly	Leu	Ala	Asn	Leu	Glu
				245					250					255
Tyr	Leu	Leu	Leu	Lys	Asn	Ser	Arg	Ile	Arg	Asn	Val	Thr	Arg	Asp
				260					265					270
Gly	Phe	Ser	Gly	Ile	Asn	Asn	Leu	Lys	His	Leu	Ile	Leu	Ser	His
				275					280					285
Asn	Asp	Leu	Glu	Asn	Leu	Asn	Ser	Asp	Thr	Phe	Ser	Leu	Leu	Lys
				290					295					300
Asn	Leu	Ile	Tyr	Leu	Lys	Leu	Asp	Arg	Asn	Arg	Ile	Ile	Ser	Ile
				305					310					315
Asp	Asn	Asp	Thr	Phe	Glu	Asn	Met	Gly	Ala	Ser	Leu	Lys	Ile	Leu
				320					325					330
Asn	Leu	Ser	Phe	Asn	Asn	Leu	Thr	Ala	Leu	His	Pro	Arg	Val	Leu
				335					340					345
Lys	Pro	Leu	Ser	Ser	Leu	Ile	His	Leu	Gln	Ala	Asn	Ser	Asn	Pro
				350					355					360
Trp	Glu	Cys	Asn	Cys	Lys	Leu	Leu	Gly	Leu	Arg	Asp	Trp	Leu	Ala
				365					370					375
Ser	Ser	Ala	Ile	Thr	Leu	Asn	Ile	Tyr	Cys	Gln	Asn	Pro	Pro	Ser
				380					385					390
Met	Arg	Gly	Arg	Ala	Leu	Arg	Tyr	Ile	Asn	Ile	Thr	Asn	Cys	Val
				395					400					405
Thr	Ser	Ser	Ile	Asn	Val	Ser	Arg	Ala	Trp	Ala	Val	Val	Lys	Ser
				410					415					420
Pro	His	Ile	His	His	Lys	Thr	Thr	Ala	Leu	Met	Met	Ala	Trp	His
				425					430					435
Lys	Val	Thr	Thr	Asn	Gly	Ser	Pro	Leu	Glu	Asn	Thr	Glu	Thr	Glu
				440					445					450
Asn	Ile	Thr	Phe	Trp	Glu	Arg	Ile	Pro	Thr	Ser	Pro	Ala	Gly	Arg
				455					460					465
Phe	Phe	Gln	Glu	Asn	Ala	Phe	Gly	Asn	Pro	Leu	Glu	Thr	Thr	Ala
				470					475					480
Val	Leu	Pro	Val	Gln	Ile	Gln	Leu	Thr	Thr	Ser	Val	Thr	Leu	Asn

	485	490	495
Leu Glu Lys Asn Ser Ala Leu Pro Asn Asp Ala Ala Ser Met Ser	500	505	510
Gly Lys Thr Ser Leu Ile Cys Thr Gln Glu Val Glu Lys Leu Asn	515	520	525
Glu Ala Phe Asp Ile Leu Leu Ala Phe Phe Ile Leu Ala Cys Val	530	535	540
Leu Ile Ile Phe Leu Ile Tyr Lys Val Val Gln Phe Lys Gln Lys	545	550	555
Leu Lys Ala Ser Glu Asn Ser Arg Glu Asn Arg Leu Glu Tyr Tyr	560	565	570
Ser Phe Tyr Gln Ser Ala Arg Tyr Asn Val Thr Ala Ser Ile Cys	575	580	585
Asn Thr Ser Pro Asn Ser Leu Glu Ser Pro Gly Leu Glu Gln Ile	590	595	600
Arg Leu His Lys Gln Ile Val Pro Glu Asn Glu Ala Gln Val Ile	605	610	615
Leu Phe Glu His Ser Ala Leu	620		

<210> 181
 <211> 1624
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 1560-1561
 <223> unknown base

<400> 181
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 aaccgtcctc tcgggctctg ggcgtgtccg agaccgcgct ccccgccgaa 100
 atcaagctcc gagtcacccg tgtggggcat tcgtcccccc tggcacagtt 150
 ggctcttttc cagaagcccg ttttgtttgt ttacgtcta aattcgcgtc 200
 gggttcttatt tctctccctg gcaaggtctg aagacgggta ggagaataac 250
 ctgtgtcagc gtgttatgat gccgtcccgt accaacctgg ctactggaat 300
 cccagtagt aaagtgaat attcaaggct ctccagcaca gacgatggct 350
 acattgacct tcagtttaag aaaaccctc ctaagatccc ttataaggcc 400
 atcgcaattg ccaactgtgt gtttttgatt ggcgcctttc tcattattat 450

	20		25		30									
Asp	Leu	Gln	Phe	Lys	Lys	Thr	Pro	Pro	Lys	Ile	Pro	Tyr	Lys	Ala
				35					40					45
Ile	Ala	Leu	Ala	Thr	Val	Leu	Phe	Leu	Ile	Gly	Ala	Phe	Leu	Ile
				50					55					60
Ile	Ile	Gly	Ser	Leu	Leu	Leu	Ser	Gly	Tyr	Ile	Ser	Lys	Gly	Gly
				65					70					75
Ala	Asp	Arg	Ala	Val	Pro	Val	Leu	Ile	Ile	Gly	Ile	Leu	Val	Phe
				80					85					90
Leu	Pro	Gly	Phe	Tyr	His	Leu	Arg	Ile	Ala	Tyr	Tyr	Ala	Ser	Lys
				95					100					105
Gly	Tyr	Arg	Gly	Tyr	Ser	Tyr	Asp	Asp	Ile	Pro	Asp	Phe	Asp	Asp
				110					115					120

<210> 183
 <211> 2823
 <212> DNA
 <213> Homo Sapien

<400> 183
 ctaaaaaata caaaaattag ctgggcgtgg tgtcatgtac ctgtaatccc 50
 agctactcaa gaggctgagg caggagaatc gcttgaaccc aggaggcaga 100
 ggttgcagtg agccaagatt aagtcactgc actccagcct gggtgacaga 150
 gcaagactct gtatcaaaat aaataaataa agtacaactc tggatgggca 200
 tgggtggctta tgtctgtaat ccagcactt tgggaacttg aggcgggtag 250
 attgcttgag tccgggagtt tgagaccagt ctgggtaata tggtaaccct 300
 gtctaccaa aatacaggta ttagccagtc tcataactcg gtctcaaaat 350
 aaataaatac atacatacat agatgaaaat ttaaaaaata aagtccaact 400
 cagcggtttt cagcatattt acagagttgt acaatcttca ccactatcta 450
 atttcagaac attttcatca cccccaaaag aaacctaacc cattgactat 500
 ctctccatth cctccctctc cctagcctct ggcaaccact aatctctttt 550
 ttgtctctat agatttgcct attttggaca gttcatatac aaggaatcat 600
 accacatgta gccttttgtg tccggcttct ttgattaata gaatgttttc 650
 aaggctcatc tatgctgtag cctgtatcag cacttcattc ctttctatgg 700
 ctgaataata gtccactgta gggatgtgcc atgtttttcc actagctgat 750
 ggacatttgg gttgtttcca ccttctggct attataaata ttgctgctat 800

aaatattcac ttacaagttt ttgtgtggac atatgttttt atttcttctg 850
 gtatatcctt cggagtggaa ctgctggatc aggtggtaac tctaggtcta 900
 acctggcagt taaacagaat cctatgcatg ctgtagtcca tgagttgaaa 950
 taaacacttg acccatagta agtgccagat catcttcatt tcacagcaac 1000
 cagtaatttc acagatgagg aatgaaggc tcccagaggt gaactggctt 1050
 ttcccatttg agcagttcca agtcagacag ttaaaaagtg gcaggacctg 1100
 gaagagaagc tagttctttc accctggcat tcagggtgc ctcctgggct 1150
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 ggaagatcaa agatacgggtg cagaaactgg cttcggacca taaggacatt 1350
 cacagcagtg tatcccgagt gggcaaagcc attgacagga acttcgactc 1400
 tgagatctgt ggtgttgtgt cagatgcggt gtgggacgcg cgggaacagc 1450
 agcagcagat cctgcagatg gccatcgtgg aacacctgta tcagcagggc 1500
 atgctcagcg tggccgagga gctgtgccag gaatcaacgc tgaatgtgga 1550
 cttggatttc aagcagcctt tcctagagtt gaatcgaatc ctggaagccc 1600
 tgcacgaaca agacctgggt cctgcgttgg aatgggccgt ctcccacagg 1650
 cagcgcttgc tggaactcaa cagctccctg gagttcaagc tgcaccgact 1700
 gcacttcata cgcctcttgg caggaggccc cgcgaagcag ctggaggccc 1750
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 atccaggtga tgatgggcag cctggtgtac ctgcggctgg gcttggagaa 1850
 gtcaccctac tgccacctgc tggacagcag ccactgggca gagatctgtg 1900
 agacctttac ccgggacgcc tgttccctgc tggggctttc tgtggagtcc 1950
 ccccttagcg tcagctttgc ctctggctgt gtggcgctgc ctgtgttgat 2000
 gaacatcaag gctgtgattg agcagcggca gtgcactggg gtctggaatc 2050
 acaaggacga gttaccgatt gagattgaac taggcatgaa gtgctggtac 2100
 gctcatctgt ggccatgtta tctcccagaa tgcactcaat aagctcatta 2150
 atggaggaaa cactccgtgt tcgcttgccc catcctccgc cagcagacgt 2200
 cagattccaa ccctcccatc aagctgaagt gtcctactg tcccatggag 2250

cagaacccgg cagatgggaa acgcatcata ttctgattcc tacctggaag 2300
gaattttgtt gaaaggggtt ttcacctgtg agccttggtc tgtctcggtta 2350
gggtgggtcaa cttcagtgga ctgtgggttg tttcagagcg cctgggtgag 2400
gagttccact gaggggagca ctggagcagc cctttggcag aggctgagga 2450
gggagatgga ccagcccacg cctggcacct ggctccatgg cataaggaaa 2500
gggagatgct ggctctgtg ctctgtgtgt cttttcctgt ttctgtttgc 2550
gtttgactta gtagcaaccg acagagtggc aagggtttg gtcttcagca 2600
gtagacatcc ttccaccct gccctcagcc aagtctcttg ctgccatgcc 2650
aatgctatgt ccacccttgc cctcggccc aagagtgtcc agcgggtggcc 2700
cacctcttcc tcccactaca gcctcaacag tatgtaccat ctcccactgt 2750
aaatagtccc agttagaacg gaatgccgtt gttttataac tttgaacaaa 2800
tgtatttact gcccttctca aaa 2823

<210> 184
<211> 331
<212> PRT
<213> Homo Sapien

<400> 184
Gln Cys Cys Arg Lys Ile Lys Asp Thr Val Gln Lys Leu Ala Ser
1 5 10 15
Asp His Lys Asp Ile His Ser Ser Val Ser Arg Val Gly Lys Ala
20 25 30
Ile Asp Arg Asn Phe Asp Ser Glu Ile Cys Gly Val Val Ser Asp
35 40 45
Ala Val Trp Asp Ala Arg Glu Gln Gln Gln Gln Ile Leu Gln Met
50 55 60
Ala Ile Val Glu His Leu Tyr Gln Gln Gly Met Leu Ser Val Ala
65 70 75
Glu Glu Leu Cys Gln Glu Ser Thr Leu Asn Val Asp Leu Asp Phe
80 85 90
Lys Gln Pro Phe Leu Glu Leu Asn Arg Ile Leu Glu Ala Leu His
95 100 105
Glu Gln Asp Leu Gly Pro Ala Leu Glu Trp Ala Val Ser His Arg
110 115 120
Gln Arg Leu Leu Glu Leu Asn Ser Ser Leu Glu Phe Lys Leu His
125 130 135
Arg Leu His Phe Ile Arg Leu Leu Ala Gly Gly Pro Ala Lys Gln

	140	145	150
Leu Glu Ala Leu Ser Tyr Ala Arg His Phe Gln Pro Phe Ala Arg	155	160	165
Leu His Gln Arg Glu Ile Gln Val Met Met Gly Ser Leu Val Tyr	170	175	180
Leu Arg Leu Gly Leu Glu Lys Ser Pro Tyr Cys His Leu Leu Asp	185	190	195
Ser Ser His Trp Ala Glu Ile Cys Glu Thr Phe Thr Arg Asp Ala	200	205	210
Cys Ser Leu Leu Gly Leu Ser Val Glu Ser Pro Leu Ser Val Ser	215	220	225
Phe Ala Ser Gly Cys Val Ala Leu Pro Val Leu Met Asn Ile Lys	230	235	240
Ala Val Ile Glu Gln Arg Gln Cys Thr Gly Val Trp Asn His Lys	245	250	255
Asp Glu Leu Pro Ile Glu Ile Glu Leu Gly Met Lys Cys Trp Tyr	260	265	270
His Ser Val Phe Ala Cys Pro Ile Leu Arg Gln Gln Thr Ser Asp	275	280	285
Ser Asn Pro Pro Ile Lys Leu Ile Cys Gly His Val Ile Ser Arg	290	295	300
Asp Ala Leu Asn Lys Leu Ile Asn Gly Gly Lys Leu Lys Cys Pro	305	310	315
Tyr Cys Pro Met Glu Gln Asn Pro Ala Asp Gly Lys Arg Ile Ile	320	325	330

Phe

<210> 185
 <211> 1162
 <212> DNA
 <213> Homo Sapien

<400> 185
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 tctacactct aatctgcgca aacttttgca gctgtcggga cacttctgca 100
 accccgcaga gcgcatccat caaagctttg cgcaacgcca acctcaggcg 150
 agatgacttg taccgaagag atgagaccat ccaggtgaaa ggaaacggct 200
 acgtgcagag tcctagattc ccgaacagct accccaggaa cctgctcctg 250
 acatggcggc ttcactctca ggagaataca cggatacagc tagtgtttga 300

	80	85	90
Asn Gln Phe Gly	Leu Glu Glu Ala Glu	Asn Asp Ile Cys Arg	Tyr
	95	100	105
Asp Phe Val Glu	Val Glu Asp Ile Ser	Glu Thr Ser Thr Ile	Ile
	110	115	120
Arg Gly Arg Trp	Cys Gly His Lys Glu	Val Pro Pro Arg Ile	Lys
	125	130	135
Ser Arg Thr Asn	Gln Ile Lys Ile Thr	Phe Lys Ser Asp Asp	Tyr
	140	145	150
Phe Val Ala Lys	Pro Gly Phe Lys Ile	Tyr Tyr Ser Leu Leu	Glu
	155	160	165
Asp Phe Gln Pro	Ala Ala Ala Ser Glu	Thr Asn Trp Glu Ser	Val
	170	175	180
Thr Ser Ser Ile	Ser Gly Val Ser Tyr	Asn Ser Pro Ser Val	Thr
	185	190	195
Asp Pro Thr Leu	Ile Ala Asp Ala Leu	Asp Lys Lys Ile Ala	Glu
	200	205	210
Phe Asp Thr Val	Glu Asp Leu Leu Lys	Tyr Phe Asn Pro Glu	Ser
	215	220	225
Trp Gln Glu Asp	Leu Glu Asn Met Tyr	Leu Asp Thr Pro Arg	Tyr
	230	235	240
Arg Gly Arg Ser	Tyr His Asp Arg Lys	Ser Lys Val Asp Leu	Asp
	245	250	255
Arg Leu Asn Asp	Asp Ala Lys Arg Tyr	Ser Cys Thr Pro Arg	Asn
	260	265	270
Tyr Ser Val Asn	Ile Arg Glu Glu Leu	Lys Leu Ala Asn Val	Val
	275	280	285
Phe Phe Pro Arg	Cys Leu Leu Val Gln	Arg Cys Gly Gly Asn	Cys
	290	295	300
Gly Cys Gly Thr	Val Asn Trp Arg Ser	Cys Thr Cys Asn Ser	Gly
	305	310	315
Lys Thr Val Lys	Lys Tyr His Glu Val	Leu Gln Phe Glu Pro	Gly
	320	325	330
His Ile Lys Arg	Arg Gly Arg Ala Lys	Thr Met Ala Leu Val	Asp
	335	340	345
Ile Gln Leu Asp	His His Glu Arg Cys	Asp Cys Ile Cys Ser	Ser
	350	355	360
Arg Pro Pro Arg			

<210> 187
<211> 1750
<212> DNA
<213> Homo Sapien

<400> 187
catgccgctg ccgccgctgc tgctgttgct cctggcggcg ccttggggac 50
gggcagttcc ctgtgtctct ggtggtttgc ctaaacctgc aaacatcacc 100
ttcttatcca tcaacatgaa gaatgtccta caatggactc caccagaggg 150
tcttcaagga gttaaagtta cttacactgt gcagtatttc atatatgggc 200
aaaagaaatg gctgaataaa tcagaatgca gaaatatcaa tagaacctac 250
tgtgatcttt ctgctgaaac ttctgactac gaacaccagt attatgccaa 300
agttaaggcc atttggggaa caaagtgttc caaatgggct gaaagtggac 350
ggttctatcc ttttttagaa acacaaattg gcccaccaga ggtggcactg 400
actacagatg agaagtccat ttctgttgtc ctgacagctc cagagaagtg 450
gaagagaaat ccagaagacc ttctgttttc catgcaacaa atatactcca 500
atctgaagta taacgtgtct gtgttgaata ctaaatacaa cagaacgtgg 550
tcccagtgtg tgaccaacca cacgctggcg ctcacctggc tggagccgaa 600
cactctttac tgcgtacacg tggagtcctt cgtcccaggc cccctcgc 650
gtgctcagcc ttctgagaag cagtgtgcca ggactttgaa agatcaatca 700
tcagagttca aggctaaaat catcttctgg tatgttttgc ccatatctat 750
taccgtgttt cttttttctg tgatgggcta ttccatctac cgatatatcc 800
acgttggcaa agagaaacac ccagcaaatt tgattttgat ttatggaaat 850
gaatttgaca aaagattctt tgtgcctgct gaaaaaatcg tgattaactt 900
tatcaccctc aatatctcgg atgattctaa aatttctcat caggatatga 950
gtttactggg aaaaagcagt gatgtatcca gccttaatga tctcagccc 1000
agcgggaacc tgaggccccc tcaggaggaa gaggaggtga aacatttagg 1050
gtatgcttcg catttgatgg aaattttttg tgactctgaa gaaaacacgg 1100
aaggtacttc tctcaccag caagagtccc tcagcagaac aatacccccg 1150
gataaaacag tcattgaata tgaatatgat gtcagaacca ctgacatttg 1200
tgcggggcct gaagagcagg agctcagttt gcaggaggag gtgtccacac 1250
aaggaacatt attggagtcg caggcagcgt tggcagtctt gggcccgcaa 1300

acgttacagt actcatacac ccctcagctc caagacttag accccctggc 1350
gcaggagcac acagactcgg aggagggggcc ggaggaagag ccatcgacga 1400
ccctgggtcga ctgggatccc caaactggca ggctgtgtat tccttcgctg 1450
tccagcttcg accaggattc agagggctgc gagccttctg agggggatgg 1500
gctcggagag gagggctctc tatctagact ctatgaggag ccggctccag 1550
acaggccacc aggagaaaat gaaacctatc tcatgcaatt catggaggaa 1600
tggggggttat atgtgcagat ggaaaactga tgccaacact tccttttgcc 1650
ttttgtttcc tgtgcaaaca agtgagtcac ccctttgatc ccagccataa 1700
agtacctggg atgaaagaag ttttttccag tttgtcagtg tctgtgagaa 1750

<210> 188

<211> 542

<212> PRT

<213> Homo Sapien

<400> 188

Met Pro Leu Pro Pro Leu Leu Leu Leu Leu Leu Ala Ala Pro Trp
1 5 10 15

Gly Arg Ala Val Pro Cys Val Ser Gly Gly Leu Pro Lys Pro Ala
20 25 30

Asn Ile Thr Phe Leu Ser Ile Asn Met Lys Asn Val Leu Gln Trp
35 40 45

Thr Pro Pro Glu Gly Leu Gln Gly Val Lys Val Thr Tyr Thr Val
50 55 60

Gln Tyr Phe Ile Tyr Gly Gln Lys Lys Trp Leu Asn Lys Ser Glu
65 70 75

Cys Arg Asn Ile Asn Arg Thr Tyr Cys Asp Leu Ser Ala Glu Thr
80 85 90

Ser Asp Tyr Glu His Gln Tyr Tyr Ala Lys Val Lys Ala Ile Trp
95 100 105

Gly Thr Lys Cys Ser Lys Trp Ala Glu Ser Gly Arg Phe Tyr Pro
110 115 120

Phe Leu Glu Thr Gln Ile Gly Pro Pro Glu Val Ala Leu Thr Thr
125 130 135

Asp Glu Lys Ser Ile Ser Val Val Leu Thr Ala Pro Glu Lys Trp
140 145 150

Lys Arg Asn Pro Glu Asp Leu Pro Val Ser Met Gln Gln Ile Tyr
155 160 165

Ser Asn Leu Lys Tyr Asn Val Ser Val Leu Asn Thr Lys Ser Asn

Thr	Thr	Leu	Val	Asp	Trp	Asp	Pro	Gln	Thr	Gly	Arg	Leu	Cys	Ile
				470					475					480
Pro	Ser	Leu	Ser	Ser	Phe	Asp	Gln	Asp	Ser	Glu	Gly	Cys	Glu	Pro
				485					490					495
Ser	Glu	Gly	Asp	Gly	Leu	Gly	Glu	Glu	Gly	Leu	Leu	Ser	Arg	Leu
				500					505					510
Tyr	Glu	Glu	Pro	Ala	Pro	Asp	Arg	Pro	Pro	Gly	Glu	Asn	Glu	Thr
				515					520					525
Tyr	Leu	Met	Gln	Phe	Met	Glu	Glu	Trp	Gly	Leu	Tyr	Val	Gln	Met
				530					535					540

Glu Asn

<210> 189
 <211> 2150
 <212> DNA
 <213> Homo Sapien

<400> 189
 atgtgctgct ggccgctgct cctgctgtgg gggctgctcc ccgggacggc 50
 ggcgggggggc tcgggccgaa cctatccgca ccggaccctc ctggactcgg 100
 agggcaagta ctggctgggc tggagccagc ggggcagcca gatcgccttc 150
 cgcctccagg tgcgcactgc aggctacgtg ggcttcggct tctcgccac 200
 cggggccatg gcgtccgccc acatcgctcgt gggcgggggtg gccacgggc 250
 ggccctacct ccaggattat ttacaaatg caaatagaga gttgaaaaaa 300
 gatgctcagc aagattacca tctagaatat gccatggaaa atagcacaca 350
 cacaataatt gaatttacca gagagctgca tacatgtgac ataatgaca 400
 agagtataac ggatagcact gtgagagtga tctgggccta ccaccatgaa 450
 gatgcaggag aagctgggcc caagtacat gactccaata ggggcaccaa 500
 gagtttgagg ttattgaatc ctgagaaaac tagtgtgcta tctacagcct 550
 taccatactt tgatctggta aatcaggacg tccccatccc aaacaaagat 600
 acaacatatt ggtgccaaat gtttaagatt cctgtgttcc aagaaaagca 650
 tcatgtaata aagggtgagc cagtgcagca gagaggccat gagagtctgg 700
 tgcaccacat cctgctctat cagtgcagca acaactttaa cgacagcgtt 750
 ctggagtcgg gccacgagtg ctatcacccc aacatgcccg atgcattcct 800
 cacctgtgaa actgtgattt ttgcctgggc tattggtgga gagggctttt 850

cttatccacc tcatgttgga ttatcccttg gcaactccatt agatccgcat 900
 tatgtgctcc tagaagtcca ttatgataat cccacttatg aggaaggctt 950
 aatagataat tctggactga gggtatttta cacaatggat ataaggaaat 1000
 atgatgctgg ggtgattgag gctggcctct gggtgagcct cttccatacc 1050
 atccctccag ggatgcctga gttccagtct gagggtcact gcactttgga 1100
 gtgcctggaa gaggctctgg aagccgaaaa gccaaagtga attcatgtgt 1150
 ttgctgttct tctccatgct cacctggctg gcagaggcat caggctgcgt 1200
 cattttcgaa aagggaagga aatgaaatta cttgcctatg atgatgattt 1250
 tgacttcaat ttccaggagt ttcagtatct aaaggaagaa caaacaatct 1300
 taccaggaga taacctaat actgagtgtc gctacaacac gaaagataga 1350
 gctgagatga cttggggagg actaagcacc aggagtgaat tgtgtctctc 1400
 ataccttctt tattacccaa gaattaatct tactcgatgt gcaagtattc 1450
 cagacattat ggaacaactt cagttcattg gggttaagga gatctacaga 1500
 ccagtcacga cctggccttt cattatcaaa agtcccaagc aatataaaaa 1550
 cctttctttc atggatgcta tgaataagtt taaatggact aaaaaggaag 1600
 gtctctcctt caacaagctg gtcctcagcc tgccagtga tgtgagatgt 1650
 tccaagacag acaatgctga gtggtcgatt caaggaatga cagcattacc 1700
 tccagatata gaaagaccct ataaagcaga acctttggtg tgtggcacgt 1750
 cttcttcctc ttccctgcac agagatttct ccatcaactt gcttgtttgc 1800
 cttctgctac tcagctgcac gctgagcacc aagagcttgt gatcaaaatt 1850
 ctggttgact tgacaatgtt ttctatgatc tgaacctgtc atttgaagta 1900
 caggttaaag actgtgtcca ctttgggcat gaagagtgtg gagacttttc 1950
 ttccccattt tccctccctc ctttttcctt tccatgttac atgagagaca 2000
 tcaatcaggt tctcttctct ttcttagaaa tacctgatgt tatatatata 2050
 tgggtcaataa aataaaaactg gcctgactta agataaccat tttaaaaaat 2100
 tgggctgtca tgtgggaata aaagaattct ttctttccta aaaaaaaaaa 2150

<210> 190
 <211> 613
 <212> PRT
 <213> Homo Sapien

 <400> 190

Met	Cys	Cys	Trp	Pro	Leu	Leu	Leu	Leu	Trp	Gly	Leu	Leu	Pro	Gly	
1				5					10					15	
Thr	Ala	Ala	Gly	Gly	Ser	Gly	Arg	Thr	Tyr	Pro	His	Arg	Thr	Leu	
				20					25					30	
Leu	Asp	Ser	Glu	Gly	Lys	Tyr	Trp	Leu	Gly	Trp	Ser	Gln	Arg	Gly	
				35					40					45	
Ser	Gln	Ile	Ala	Phe	Arg	Leu	Gln	Val	Arg	Thr	Ala	Gly	Tyr	Val	
				50					55					60	
Gly	Phe	Gly	Phe	Ser	Pro	Thr	Gly	Ala	Met	Ala	Ser	Ala	Asp	Ile	
				65					70					75	
Val	Val	Gly	Gly	Val	Ala	His	Gly	Arg	Pro	Tyr	Leu	Gln	Asp	Tyr	
				80					85					90	
Phe	Thr	Asn	Ala	Asn	Arg	Glu	Leu	Lys	Lys	Asp	Ala	Gln	Gln	Asp	
				95					100					105	
Tyr	His	Leu	Glu	Tyr	Ala	Met	Glu	Asn	Ser	Thr	His	Thr	Ile	Ile	
				110					115					120	
Glu	Phe	Thr	Arg	Glu	Leu	His	Thr	Cys	Asp	Ile	Asn	Asp	Lys	Ser	
				125					130					135	
Ile	Thr	Asp	Ser	Thr	Val	Arg	Val	Ile	Trp	Ala	Tyr	His	His	Glu	
				140					145					150	
Asp	Ala	Gly	Glu	Ala	Gly	Pro	Lys	Tyr	His	Asp	Ser	Asn	Arg	Gly	
				155					160					165	
Thr	Lys	Ser	Leu	Arg	Leu	Leu	Asn	Pro	Glu	Lys	Thr	Ser	Val	Leu	
				170					175					180	
Ser	Thr	Ala	Leu	Pro	Tyr	Phe	Asp	Leu	Val	Asn	Gln	Asp	Val	Pro	
				185					190					195	
Ile	Pro	Asn	Lys	Asp	Thr	Thr	Tyr	Trp	Cys	Gln	Met	Phe	Lys	Ile	
				200					205					210	
Pro	Val	Phe	Gln	Glu	Lys	His	His	Val	Ile	Lys	Val	Glu	Pro	Val	
				215					220					225	
Ile	Gln	Arg	Gly	His	Glu	Ser	Leu	Val	His	His	Ile	Leu	Leu	Tyr	
				230					235					240	
Gln	Cys	Ser	Asn	Asn	Phe	Asn	Asp	Ser	Val	Leu	Glu	Ser	Gly	His	
				245					250					255	
Glu	Cys	Tyr	His	Pro	Asn	Met	Pro	Asp	Ala	Phe	Leu	Thr	Cys	Glu	
				260					265					270	
Thr	Val	Ile	Phe	Ala	Trp	Ala	Ile	Gly	Gly	Glu	Gly	Phe	Ser	Tyr	
				275					280					285	
Pro	Pro	His	Val	Gly	Leu	Ser	Leu	Gly	Thr	Pro	Leu	Asp	Pro	His	

290										295					300				
Tyr	Val	Leu	Leu	Glu	Val	His	Tyr	Asp	Asn	Pro	Thr	Tyr	Glu	Glu					
				305					310					315					
Gly	Leu	Ile	Asp	Asn	Ser	Gly	Leu	Arg	Leu	Phe	Tyr	Thr	Met	Asp					
				320					325					330					
Ile	Arg	Lys	Tyr	Asp	Ala	Gly	Val	Ile	Glu	Ala	Gly	Leu	Trp	Val					
				335					340					345					
Ser	Leu	Phe	His	Thr	Ile	Pro	Pro	Gly	Met	Pro	Glu	Phe	Gln	Ser					
				350					355					360					
Glu	Gly	His	Cys	Thr	Leu	Glu	Cys	Leu	Glu	Glu	Ala	Leu	Glu	Ala					
				365					370					375					
Glu	Lys	Pro	Ser	Gly	Ile	His	Val	Phe	Ala	Val	Leu	Leu	His	Ala					
				380					385					390					
His	Leu	Ala	Gly	Arg	Gly	Ile	Arg	Leu	Arg	His	Phe	Arg	Lys	Gly					
				395					400					405					
Lys	Glu	Met	Lys	Leu	Leu	Ala	Tyr	Asp	Asp	Asp	Phe	Asp	Phe	Asn					
				410					415					420					
Phe	Gln	Glu	Phe	Gln	Tyr	Leu	Lys	Glu	Glu	Gln	Thr	Ile	Leu	Pro					
				425					430					435					
Gly	Asp	Asn	Leu	Ile	Thr	Glu	Cys	Arg	Tyr	Asn	Thr	Lys	Asp	Arg					
				440					445					450					
Ala	Glu	Met	Thr	Trp	Gly	Gly	Leu	Ser	Thr	Arg	Ser	Glu	Met	Cys					
				455					460					465					
Leu	Ser	Tyr	Leu	Leu	Tyr	Tyr	Pro	Arg	Ile	Asn	Leu	Thr	Arg	Cys					
				470					475					480					
Ala	Ser	Ile	Pro	Asp	Ile	Met	Glu	Gln	Leu	Gln	Phe	Ile	Gly	Val					
				485					490					495					
Lys	Glu	Ile	Tyr	Arg	Pro	Val	Thr	Thr	Trp	Pro	Phe	Ile	Ile	Lys					
				500					505					510					
Ser	Pro	Lys	Gln	Tyr	Lys	Asn	Leu	Ser	Phe	Met	Asp	Ala	Met	Asn					
				515					520					525					
Lys	Phe	Lys	Trp	Thr	Lys	Lys	Glu	Gly	Leu	Ser	Phe	Asn	Lys	Leu					
				530					535					540					
Val	Leu	Ser	Leu	Pro	Val	Asn	Val	Arg	Cys	Ser	Lys	Thr	Asp	Asn					
				545					550					555					
Ala	Glu	Trp	Ser	Ile	Gln	Gly	Met	Thr	Ala	Leu	Pro	Pro	Asp	Ile					
				560					565					570					
Glu	Arg	Pro	Tyr	Lys	Ala	Glu	Pro	Leu	Val	Cys	Gly	Thr	Ser	Ser					
				575					580					585					

Ser Ser Ser Leu His Arg Asp Phe Ser Ile Asn Leu Leu Val Cys
590 595 600

Leu Leu Leu Leu Ser Cys Thr Leu Ser Thr Lys Ser Leu
605 610

<210> 191
<211> 1647
<212> DNA
<213> Homo Sapien

<400> 191
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ttctttataa cattttcttc tgcatttccc ttagtccgga tgacggaaaa 100
tgaagaaaat atgcaactgg ctcaggcata tctcaaccag ttctactctc 150
ttgaaataga agggaatcat cttgttcaaa gcaagaatag gagtctcata 200
gatgacaaaa ttcgggaaat gcaagcattt tttggattga cagtgactgg 250
aaaactggac tcaaacaccc ttgagatcat gaagacaccc aggtgtgggg 300
tgcctgatgt gggccagtat ggctacaccc tccctgggtg gagaaaatac 350
aacctcacct acagaataat aaactatact ccggatatgg cacgagctgc 400
tgtggatgag gctatccaag aaggtttaga agtgtggagc aaagtcactc 450
cactaaaatt caccaagatt tcaaagggga ttgcagacat catgattgcc 500
tttaggactc gagtccatgg tcggtgtcct cgctattttg atggtccctt 550
gggagtgcct ggccatgcct ttctcctgg tccgggtctg ggtggtgaca 600
ctcattttga tgaggatgaa aactggacca aggatggagc aggattcaac 650
ttgtttcttg tggctgctca tgaatttggc catgcactgg ggctctctca 700
ctccaatgat caaacagcct tgatgttccc aaattatgtc tccctggatc 750
ccagaaaata cccactttct caggatgata tcaatggaat ccagtccatc 800
tatggaggtc tgcctaaggt acctgctaag ccaaaggaac ccactatacc 850
ccatgcctgt gaccctgact tgacttttga cgctatcaca actttccgca 900
gagaagtaat gttcttttaa ggcaggcacc tatggaggat ctattatgat 950
atcacggatg ttgagtttga attaattgct tcattctggc catctctgcc 1000
agctgatctg caagctgcat acgagaaccc cagagataag attctgggtt 1050
ttaaagatga aaacttctgg atgatcagag gatatgctgt cttgccagat 1100
tatcccaaat ccatccatac attaggtttt ccaggacgtg tgaagaaaat 1150

agatgcagcc gtctgtgata agaccacaag aaaaacctac ttctttgtgg 1200
 gcatttggtg ctggagggtt gatgaaatga cccaaaccat ggacaaagga 1250
 ttcccgcaga gagtggtaaa acactttcct ggaatcagta tccgtgttga 1300
 tgctgctttc cagtacaaag gattcttctt tttcagccgt ggatcaaagc 1350
 aatttgaata caacattaag acaaagaata ttacccgaat catgagaact 1400
 aatacttggt ttcaatgcaa agaaccaaag aactcctcat ttggttttga 1450
 tatcaacaag gaaaaagcac attcaggagg cataaagata ttgtatcata 1500
 agagttaaag cttgtttatt tttggtattg ttcatttgct gaaaaacact 1550
 tctatttatc aataaattca tagacctaaa ataaacctca acaggtcttt 1600
 taatataaat tctgcttcaa aatagaataa aaccattctt taacaac 1647

<210> 192
 <211> 513
 <212> PRT
 <213> Homo Sapien

<400> 192
 Met Lys Arg Leu Leu Leu Leu Phe Leu Phe Phe Ile Thr Phe Ser
 1 5 10 15
 Ser Ala Phe Pro Leu Val Arg Met Thr Glu Asn Glu Glu Asn Met
 20 25 30
 Gln Leu Ala Gln Ala Tyr Leu Asn Gln Phe Tyr Ser Leu Glu Ile
 35 40 45
 Glu Gly Asn His Leu Val Gln Ser Lys Asn Arg Ser Leu Ile Asp
 50 55 60
 Asp Lys Ile Arg Glu Met Gln Ala Phe Phe Gly Leu Thr Val Thr
 65 70 75
 Gly Lys Leu Asp Ser Asn Thr Leu Glu Ile Met Lys Thr Pro Arg
 80 85 90
 Cys Gly Val Pro Asp Val Gly Gln Tyr Gly Tyr Thr Leu Pro Gly
 95 100 105
 Trp Arg Lys Tyr Asn Leu Thr Tyr Arg Ile Ile Asn Tyr Thr Pro
 110 115 120
 Asp Met Ala Arg Ala Ala Val Asp Glu Ala Ile Gln Glu Gly Leu
 125 130 135
 Glu Val Trp Ser Lys Val Thr Pro Leu Lys Phe Thr Lys Ile Ser
 140 145 150
 Lys Gly Ile Ala Asp Ile Met Ile Ala Phe Arg Thr Arg Val His
 155 160 165

	455		460		465
Lys Glu Pro Lys Asn Ser Ser Phe Gly Phe Asp Ile Asn Lys Glu					
	470		475		480
Lys Ala His Ser Gly Gly Ile Lys Ile Leu Tyr His Lys Ser Leu					
	485		490		495
Ser Leu Phe Ile Phe Gly Ile Val His Leu Leu Lys Asn Thr Ser					
	500		505		510
Ile Tyr Gln					

<210> 193
 <211> 702
 <212> DNA
 <213> Homo Sapien

<400> 193
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 ggtgcacttc ctgcctctgc tgggtgcactt tctgccccta ctggtatatt 200
 tgctgcctct gctggggcgc ttcctgcctc ggctgggtgta tctcctgccc 250
 ctgctgggtgc actttctgcc cccgctgatg cacttcctgc ctctgctggt 300
 gcacttctg gctctgctgg cacacttctt gcctctgctg gtgcacttcc 350
 tggctctgct ggcgcacttt cctgcccctg ctgggtgtatt tcctgcccct 400
 gctgggtgtac ttccttcccc tgctgggtgca cttcctgcct ctgctggcgc 450
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 gtcttcccag ttcactgaca ctggtaacag ggactctgct cttgggtgttg 550
 ctgtctgccc tggggatggg catctgtgtc ttcctttact actgctggct 600
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 tctaaggagc ccctacaccc accaggattt tccaataaag agatgttcac 700
 ca 702

<210> 194
 <211> 125
 <212> PRT
 <213> Homo Sapien

<400> 194
 Met Val Leu Gly Asn Gly Gly Cys His Pro Val Ser Ser Leu Pro
 1 5 10 15

Leu	Leu	Val	His	Phe	Leu	Pro	Leu	Leu	Val	His	Phe	Leu	Pro	Leu	
				20					25					30	
Leu	Val	Tyr	Leu	Leu	Pro	Leu	Leu	Gly	Arg	Phe	Leu	Pro	Arg	Leu	
				35					40					45	
Val	Tyr	Leu	Leu	Pro	Leu	Leu	Val	His	Phe	Leu	Pro	Pro	Leu	Met	
				50					55					60	
His	Phe	Leu	Pro	Leu	Leu	Val	His	Phe	Leu	Ala	Leu	Leu	Ala	His	
				65					70					75	
Phe	Leu	Pro	Leu	Leu	Val	His	Phe	Leu	Ala	Leu	Leu	Ala	His	Phe	
				80					85					90	
Pro	Ala	Pro	Ala	Gly	Val	Phe	Pro	Ala	Pro	Ala	Gly	Val	Leu	Pro	
				95					100					105	
Ser	Pro	Ala	Gly	Ala	Leu	Pro	Ala	Ser	Ala	Gly	Ala	Leu	Leu	Ala	
				110					115					120	
Ser	Pro	Gly	Pro	Thr											
				125											

<210> 195
 <211> 2475
 <212> DNA
 <213> Homo Sapien

<400> 195
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 tgccctcggc ccttccctgc cacgtttcgg gtcgccctgc acccccacc 150
 caggctcgtc tctcttcgaa gcgggaaggg cgccttgcag gatcctgccg 200
 cccctccaac cggatcctgg gtctagagct cccagagcgc aggcgctcgc 250
 caggactcct gcccgcgcaa ccctgaccgc cgggggggtgc ccccgggacg 300
 tagcgccgcg gagaggaagc ggcaaagggg accatgcggc gcctgactcg 350
 tcggctgggt ctgccagtct tcgggggtgct ctggatcacg gtgctgctgt 400
 tcttctgggt aaccaagagg aagttggagg tgccgacggg acctgaagtg 450
 cagaccccta agccttcgga cgctgactgg gacgacctgt gggaccagtt 500
 tgatgagcgg cggtatctga atgccccaaa gtggcgcggt ggtgacgacc 550
 cctataagct gtatgctttc aaccagcggg agagtgcgcg gatctccagc 600
 aatcgggcca tcccggacac tcgccatctg agatgcacac tgctgggtgta 650
 ttgcacggac cttccacca ctagcatcat catcaccttc cacaacgagg 700

cccgctccac gctgctcagg accatccgca gtgtattaaa ccgcacccct 750
 acgcatctga tccgggaaat catattagt gatgacttca gcaatgaccc 800
 tgatgactgt aaacagctca tcaagttgcc caaggtgaaa tgcttgcgca 850
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 gcccagggca ccactctgac tttcctcgac agccactgtg aggtgaacag 950
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 gagtctgcct cggagctcag agggggggtt gactggagcc tccacttcca 1100
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 tagagatcgt cccctgcagc cgagtggggc acgtcttccg gaagaagcac 1350
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 gcggacagct gaagtgtgga tggatgaata caagcaatac tattacgctg 1450
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 atatccgaca gagacagaag tgccctggaat ctcaaaggca gaacaaccaa 1650
 gaaaccccaa acctaaagtt gagccctgt gccaagggtca aaggcgaaga 1700
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 tcggtgatgg caccgagaac ggcaaggaaa tcgtcgtcaa cccatgtgag 1950
 tcctcactca tgagccagca ctgggacatg gtgagctctt gaggaccct 2000
 gccagaagca gcaagggcca tggggtggtg cttccctgga ccagaacaga 2050
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 gggaggtgga ggcagagccc cccaggacag gagcaactgt ctcaggagg 2150

acagaggaaa acatcacaag ccaatgggct caaagacaaa tcccacatgt 2200
tctcaaggcc gttaagttcc agtcctggcc agtcattccc tgattggtat 2250
ctggagacag aaacctaata ggaagtgttt attgttcctt ttcctacaaa 2300
ggaagcagtc tctggaggcc agaaagaaaa gccttctttt tcactaggcc 2350
aggactacat tgagagatga agaatggagg ttgtttccaa aagaaataaa 2400
gagaaactta gaagttgtct ctggaaaaaa aaaaaaaaaa aaaaaaaaaa 2450
aaaaaaaaaa aaaaaaaaaa aaaaa 2475

<210> 196

<211> 552

<212> PRT

<213> Homo Sapien

<400> 196

Met	Arg	Arg	Leu	Thr	Arg	Arg	Leu	Val	Leu	Pro	Val	Phe	Gly	Val	1	5	10	15
Leu	Trp	Ile	Thr	Val	Leu	Leu	Phe	Phe	Trp	Val	Thr	Lys	Arg	Lys	20	25	30	
Leu	Glu	Val	Pro	Thr	Gly	Pro	Glu	Val	Gln	Thr	Pro	Lys	Pro	Ser	35	40	45	
Asp	Ala	Asp	Trp	Asp	Asp	Leu	Trp	Asp	Gln	Phe	Asp	Glu	Arg	Arg	50	55	60	
Tyr	Leu	Asn	Ala	Lys	Lys	Trp	Arg	Val	Gly	Asp	Asp	Pro	Tyr	Lys	65	70	75	
Leu	Tyr	Ala	Phe	Asn	Gln	Arg	Glu	Ser	Glu	Arg	Ile	Ser	Ser	Asn	80	85	90	
Arg	Ala	Ile	Pro	Asp	Thr	Arg	His	Leu	Arg	Cys	Thr	Leu	Leu	Val	95	100	105	
Tyr	Cys	Thr	Asp	Leu	Pro	Pro	Thr	Ser	Ile	Ile	Ile	Thr	Phe	His	110	115	120	
Asn	Glu	Ala	Arg	Ser	Thr	Leu	Leu	Arg	Thr	Ile	Arg	Ser	Val	Leu	125	130	135	
Asn	Arg	Thr	Pro	Thr	His	Leu	Ile	Arg	Glu	Ile	Ile	Leu	Val	Asp	140	145	150	
Asp	Phe	Ser	Asn	Asp	Pro	Asp	Asp	Cys	Lys	Gln	Leu	Ile	Lys	Leu	155	160	165	
Pro	Lys	Val	Lys	Cys	Leu	Arg	Asn	Asn	Glu	Arg	Gln	Gly	Leu	Val	170	175	180	
Arg	Ser	Arg	Ile	Arg	Gly	Ala	Asp	Ile	Ala	Gln	Gly	Thr	Thr	Leu	185	190	195	

Thr	Phe	Leu	Asp	Ser	His	Cys	Glu	Val	Asn	Arg	Asp	Trp	Leu	Gln	
				200					205					210	
Pro	Leu	Leu	His	Arg	Val	Lys	Glu	Asp	Tyr	Thr	Arg	Val	Val	Cys	
				215					220					225	
Pro	Val	Ile	Asp	Ile	Ile	Asn	Leu	Asp	Thr	Phe	Thr	Tyr	Ile	Glu	
				230					235					240	
Ser	Ala	Ser	Glu	Leu	Arg	Gly	Gly	Phe	Asp	Trp	Ser	Leu	His	Phe	
				245					250					255	
Gln	Trp	Glu	Gln	Leu	Ser	Pro	Glu	Gln	Lys	Ala	Arg	Arg	Leu	Asp	
				260					265					270	
Pro	Thr	Glu	Pro	Ile	Arg	Thr	Pro	Ile	Ile	Ala	Gly	Gly	Leu	Phe	
				275					280					285	
Val	Ile	Asp	Lys	Ala	Trp	Phe	Asp	Tyr	Leu	Gly	Lys	Tyr	Asp	Met	
				290					295					300	
Asp	Met	Asp	Ile	Trp	Gly	Gly	Glu	Asn	Phe	Glu	Ile	Ser	Phe	Arg	
				305					310					315	
Val	Trp	Met	Cys	Gly	Gly	Ser	Leu	Glu	Ile	Val	Pro	Cys	Ser	Arg	
				320					325					330	
Val	Gly	His	Val	Phe	Arg	Lys	Lys	His	Pro	Tyr	Val	Phe	Pro	Asp	
				335					340					345	
Gly	Asn	Ala	Asn	Thr	Tyr	Ile	Lys	Asn	Thr	Lys	Arg	Thr	Ala	Glu	
				350					355					360	
Val	Trp	Met	Asp	Glu	Tyr	Lys	Gln	Tyr	Tyr	Tyr	Ala	Ala	Arg	Pro	
				365					370					375	
Phe	Ala	Leu	Glu	Arg	Pro	Phe	Gly	Asn	Val	Glu	Ser	Arg	Leu	Asp	
				380					385					390	
Leu	Arg	Lys	Asn	Leu	Arg	Cys	Gln	Ser	Phe	Lys	Trp	Tyr	Leu	Glu	
				395					400					405	
Asn	Ile	Tyr	Pro	Glu	Leu	Ser	Ile	Pro	Lys	Glu	Ser	Ser	Ile	Gln	
				410					415					420	
Lys	Gly	Asn	Ile	Arg	Gln	Arg	Gln	Lys	Cys	Leu	Glu	Ser	Gln	Arg	
				425					430					435	
Gln	Asn	Asn	Gln	Glu	Thr	Pro	Asn	Leu	Lys	Leu	Ser	Pro	Cys	Ala	
				440					445					450	
Lys	Val	Lys	Gly	Glu	Asp	Ala	Lys	Ser	Gln	Val	Trp	Ala	Phe	Thr	
				455					460					465	
Tyr	Thr	Gln	Gln	Ile	Leu	Gln	Glu	Glu	Leu	Cys	Leu	Ser	Val	Ile	
				470					475					480	
Thr	Leu	Phe	Pro	Gly	Ala	Pro	Val	Val	Leu	Val	Leu	Cys	Lys	Asn	

	485		490		495
Gly Asp Asp Arg Gln Gln Trp Thr Lys Thr Gly Ser His Ile Glu					
	500		505		510
His Ile Ala Ser His Leu Cys Leu Asp Thr Asp Met Phe Gly Asp					
	515		520		525
Gly Thr Glu Asn Gly Lys Glu Ile Val Val Asn Pro Cys Glu Ser					
	530		535		540
Ser Leu Met Ser Gln His Trp Asp Met Val Ser Ser					
	545		550		

<210> 197
 <211> 4060
 <212> DNA
 <213> Homo Sapien

<400> 197
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 accccgcacc acggagcgcc acatcgccgt acacaagcgg cttgtgctgg 150
 ccttcgctgt gtcctcgtg gcattgctcg cggtcacaat gctcgtctgt 200
 ctgctcagcc tgcgcttcga cgagtgcggg gcgagtgcc aagccaggcgc 250
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 gccacctgaa gccgctgcac tacaatctga tgctcaccgc cttcatggag 500
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 caccgcctac gtagtgctgc acgcttcccc agtggcggtg gagaaagtgc 600
 agctggccga ggaccgggcg ttcggggctg tccctgtagc cggttttttc 650
 ctctaccgc aaaccaggt cttagtgggt gtgctgaata ggacactgga 700
 cgcgcagagg aattacaatc tgaagattat ctacaacgcg ctcacgaga 750
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 agattccttg gtgttactca gttttcgctt acacatgcc aagaggcatt 850
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 tcaaggaatt tatctcaaca ttattctttc tatgtcctaa ctaaatttct 3950
 caactgttat gaatttttca tctacttctt gaacagtggc ctattctgct 4000
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 aaaaaaaaaa 4060

<210> 198
 <211> 1024
 <212> PRT
 <213> Homo Sapien

<400> 198
 Met Gly Glu Asp Asp Ala Ala Leu Arg Ala Gly Ser Arg Gly Leu
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 Ser Asp Pro Trp Ala Asp Ser Val Gly Val Arg Pro Arg Thr Thr
 20 25 30
 Glu Arg His Ile Ala Val His Lys Arg Leu Val Leu Ala Phe Ala
 35 40 45
 Val Ser Leu Val Ala Leu Leu Ala Val Thr Met Leu Ala Val Leu
 50 55 60
 Leu Ser Leu Arg Phe Asp Glu Cys Gly Ala Ser Ala Thr Pro Gly
 65 70 75
 Ala Asp Gly Gly Pro Ser Gly Phe Pro Glu Arg Gly Gly Asn Gly
 80 85 90
 Ser Leu Pro Gly Ser Ala Arg Arg Asn His His Ala Gly Gly Asp
 95 100 105
 Ser Trp Gln Pro Glu Ala Gly Gly Val Ala Ser Pro Gly Thr Thr
 110 115 120
 Ser Ala Gln Pro Pro Ser Glu Glu Glu Arg Glu Pro Trp Glu Pro
 125 130 135
 Trp Thr Gln Leu Arg Leu Ser Gly His Leu Lys Pro Leu His Tyr
 140 145 150
 Asn Leu Met Leu Thr Ala Phe Met Glu Asn Phe Thr Phe Ser Gly
 155 160 165
 Glu Val Asn Val Glu Ile Ala Cys Arg Asn Ala Thr Arg Tyr Val
 170 175 180
 Val Leu His Ala Ser Arg Val Ala Val Glu Lys Val Gln Leu Ala
 185 190 195
 Glu Asp Arg Ala Phe Gly Ala Val Pro Val Ala Gly Phe Phe Leu
 200 205 210

Tyr	Pro	Gln	Thr	Gln	Val	Leu	Val	Val	Val	Leu	Asn	Arg	Thr	Leu
				215					220					225
Asp	Ala	Gln	Arg	Asn	Tyr	Asn	Leu	Lys	Ile	Ile	Tyr	Asn	Ala	Leu
				230					235					240
Ile	Glu	Asn	Glu	Leu	Leu	Gly	Phe	Phe	Arg	Ser	Ser	Tyr	Val	Leu
				245					250					255
His	Gly	Glu	Arg	Arg	Phe	Leu	Gly	Val	Thr	Gln	Phe	Ser	Pro	Thr
				260					265					270
His	Ala	Arg	Lys	Ala	Phe	Pro	Cys	Phe	Asp	Glu	Pro	Ile	Tyr	Lys
				275					280					285
Ala	Thr	Phe	Lys	Ile	Ser	Ile	Lys	His	Gln	Ala	Thr	Tyr	Leu	Ser
				290					295					300
Leu	Ser	Asn	Met	Pro	Val	Glu	Thr	Ser	Val	Phe	Glu	Glu	Asp	Gly
				305					310					315
Trp	Val	Thr	Asp	His	Phe	Ser	Gln	Thr	Pro	Leu	Met	Ser	Thr	Tyr
				320					325					330
Tyr	Leu	Ala	Trp	Ala	Ile	Cys	Asn	Phe	Thr	Tyr	Arg	Glu	Thr	Thr
				335					340					345
Thr	Lys	Ser	Gly	Val	Val	Val	Arg	Leu	Tyr	Ala	Arg	Pro	Asp	Ala
				350					355					360
Ile	Arg	Arg	Gly	Ser	Gly	Asp	Tyr	Ala	Leu	His	Ile	Thr	Lys	Arg
				365					370					375
Leu	Ile	Glu	Phe	Tyr	Glu	Asp	Tyr	Phe	Lys	Val	Pro	Tyr	Ser	Leu
				380					385					390
Pro	Lys	Leu	Asp	Leu	Leu	Ala	Val	Pro	Lys	His	Pro	Tyr	Ala	Ala
				395					400					405
Met	Glu	Asn	Trp	Gly	Leu	Ser	Ile	Phe	Val	Glu	Gln	Arg	Ile	Leu
				410					415					420
Leu	Asp	Pro	Ser	Val	Ser	Ser	Ile	Ser	Tyr	Leu	Leu	Asp	Val	Thr
				425					430					435
Met	Val	Ile	Val	His	Glu	Ile	Cys	His	Gln	Trp	Phe	Gly	Asp	Leu
				440					445					450
Val	Thr	Pro	Val	Trp	Trp	Glu	Asp	Val	Trp	Leu	Lys	Glu	Gly	Phe
				455					460					465
Ala	His	Tyr	Phe	Glu	Phe	Val	Gly	Thr	Asp	Tyr	Leu	Tyr	Pro	Gly
				470					475					480
Trp	Asn	Met	Glu	Lys	Gln	Arg	Phe	Leu	Thr	Asp	Val	Leu	His	Glu
				485					490					495
Val	Met	Leu	Leu	Asp	Gly	Leu	Ala	Ser	Ser	His	Pro	Val	Ser	Gln

	500	505	510
Glu Val Leu Gln	Ala Thr Asp Ile Asp 515	Arg Val Phe Asp Trp 520	Ile 525
Ala Tyr Lys Lys	Gly Ala Ala Leu Ile 530	Arg Met Leu Ala Asn 535	Phe 540
Met Gly His Ser	Val Phe Gln Arg Gly 545	Leu Gln Asp Tyr Leu 550	Thr 555
Ile His Lys Tyr	Gly Asn Ala Ala Arg 560	Asn Asp Leu Trp Asn 565	Thr 570
Leu Ser Glu Ala	Leu Lys Arg Asn Gly 575	Lys Tyr Val Asn Ile 580	Gln 585
Glu Val Met Asp	Gln Trp Thr Leu Gln 590	Met Gly Tyr Pro Val 595	Ile 600
Thr Ile Leu Gly	Asn Thr Thr Ala Glu 605	Asn Arg Ile Ile Ile 610	Thr 615
Gln Gln His Phe	Ile Tyr Asp Ile Ser 620	Ala Lys Thr Lys Ala 625	Leu 630
Lys Leu Gln Asn	Asn Ser Tyr Leu Trp 635	Gln Ile Pro Leu Thr 640	Ile 645
Val Val Gly Asn	Arg Ser His Val Ser 650	Ser Glu Ala Ile Ile 655	Trp 660
Val Ser Asn Lys	Ser Glu His His Arg 665	Ile Thr Tyr Leu Asp 670	Lys 675
Gly Ser Trp Leu	Leu Gly Asn Ile Asn 680	Gln Thr Gly Tyr Phe 685	Arg 690
Val Asn Tyr Asp	Leu Arg Asn Trp Arg 695	Leu Leu Ile Asp Gln 700	Leu 705
Ile Arg Asn His	Glu Val Leu Ser Val 710	Ser Asn Arg Ala Gly 715	Leu 720
Ile Asp Asp Ala	Phe Ser Leu Ala Arg 725	Ala Gly Tyr Leu Pro 730	Gln 735
Asn Ile Pro Leu	Glu Ile Ile Arg Tyr 740	Leu Ser Glu Glu Lys 745	Asp 750
Phe Leu Pro Trp	His Ala Ala Ser Arg 755	Ala Leu Tyr Pro Leu 760	Asp 765
Lys Leu Leu Asp	Arg Met Glu Asn Tyr 770	Asn Ile Phe Asn Glu 775	Tyr 780
Ile Leu Lys Gln	Val Ala Thr Thr Tyr 785	Ile Lys Leu Gly Trp 790	Pro 795

Lys	Asn	Asn	Phe	Asn	Gly	Ser	Leu	Val	Gln	Ala	Ser	Tyr	Gln	His
				800					805					810
Glu	Glu	Leu	Arg	Arg	Glu	Val	Ile	Met	Leu	Ala	Cys	Ser	Phe	Gly
				815					820					825
Asn	Lys	His	Cys	His	Gln	Gln	Ala	Ser	Thr	Leu	Ile	Ser	Asp	Trp
				830					835					840
Ile	Ser	Ser	Asn	Arg	Asn	Arg	Ile	Pro	Leu	Asn	Val	Arg	Asp	Ile
				845					850					855
Val	Tyr	Cys	Thr	Gly	Val	Ser	Leu	Leu	Asp	Glu	Asp	Val	Trp	Glu
				860					865					870
Phe	Ile	Trp	Met	Lys	Phe	His	Ser	Thr	Thr	Ala	Val	Ser	Glu	Lys
				875					880					885
Lys	Ile	Leu	Leu	Glu	Ala	Leu	Thr	Cys	Ser	Asp	Asp	Arg	Asn	Leu
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Leu	Asn	Arg	Leu	Leu	Asn	Leu	Ser	Leu	Asn	Ser	Glu	Val	Val	Leu
				905					910					915
Asp	Gln	Asp	Ala	Ile	Asp	Val	Ile	Ile	His	Val	Ala	Arg	Asn	Pro
				920					925					930
His	Gly	Arg	Asp	Leu	Ala	Trp	Lys	Phe	Phe	Arg	Asp	Lys	Trp	Lys
				935					940					945
Ile	Leu	Asn	Thr	Arg	Tyr	Gly	Glu	Ala	Leu	Phe	Met	Tyr	Ser	Lys
				950					955					960
Leu	Ile	Ser	Gly	Val	Thr	Glu	Phe	Leu	Asn	Thr	Glu	Gly	Glu	Leu
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Lys	Glu	Leu	Lys	Asn	Phe	Met	Lys	Asn	Tyr	Asp	Gly	Val	Ala	Ala
				980					985					990
Ala	Ser	Phe	Ser	Arg	Ala	Val	Glu	Thr	Val	Glu	Ala	Asn	Val	Arg
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Trp	Lys	Met	Leu	Tyr	Gln	Asp	Glu	Leu	Phe	Gln	Trp	Leu	Gly	Lys
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Ala Leu Arg His

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<211> 3461

<212> DNA

<213> Homo Sapien

<400> 199

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 <212> PRT
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 Arg Asp Ala Leu Pro Glu Gly Asp Ala Ser Pro Leu Gly Pro Tyr
 35 40 45
 Leu Leu Pro Ser Gly Ala Pro Glu Arg Gly Ser Pro Gly Lys Glu
 50 55 60
 His Pro Glu Glu Arg Val Val Thr Ala Pro Pro Ser Ser Ser Gln
 65 70 75
 Ser Ala Glu Val Leu Gly Glu Leu Val Leu Asp Gly Thr Ala Pro
 80 85 90
 Ser Ala His His Asp Ile Pro Ala Leu Ser Pro Leu Leu Pro Glu
 95 100 105
 Glu Ala Arg Pro Lys His Ala Leu Pro Pro Lys Lys Lys Leu Pro
 110 115 120
 Ser Leu Lys Gln Val Asn Ser Ala Arg Lys Gln Leu Arg Pro Lys
 125 130 135
 Ala Thr Ser Ala Ala Thr Val Gln Arg Ala Gly Ser Gln Pro Ala
 140 145 150
 Ser Gln Gly Leu Asp Leu Leu Ser Ser Ser Thr Glu Lys Pro Gly
 155 160 165

Pro	Pro	Gly	Asp	Pro	Asp	Pro	Ile	Val	Ala	Ser	Glu	Glu	Ala	Ser	170	175	180
Glu	Val	Pro	Leu	Trp	Leu	Asp	Arg	Lys	Glu	Ser	Ala	Val	Pro	Thr	185	190	195
Thr	Pro	Ala	Pro	Leu	Gln	Ile	Ser	Pro	Phe	Thr	Ser	Gln	Pro	Tyr	200	205	210
Val	Ala	His	Thr	Leu	Pro	Gln	Arg	Pro	Glu	Pro	Gly	Glu	Pro	Gly	215	220	225
Pro	Asp	Met	Ala	Gln	Glu	Ala	Pro	Gln	Glu	Asp	Thr	Ser	Pro	Met	230	235	240
Ala	Leu	Met	Asp	Lys	Gly	Glu	Asn	Glu	Leu	Thr	Gly	Ser	Ala	Ser	245	250	255
Glu	Glu	Ser	Gln	Glu	Thr	Thr	Thr	Ser	Thr	Ile	Ile	Thr	Thr	Thr	260	265	270
Val	Ile	Thr	Thr	Glu	Gln	Ala	Pro	Ala	Leu	Cys	Ser	Val	Ser	Phe	275	280	285
Ser	Asn	Pro	Glu	Gly	Tyr	Ile	Asp	Ser	Ser	Asp	Tyr	Pro	Leu	Leu	290	295	300
Pro	Leu	Asn	Asn	Phe	Leu	Glu	Cys	Thr	Tyr	Asn	Val	Thr	Val	Tyr	305	310	315
Thr	Gly	Tyr	Gly	Val	Glu	Leu	Gln	Val	Lys	Ser	Val	Asn	Leu	Ser	320	325	330
Asp	Gly	Glu	Leu	Leu	Ser	Ile	Arg	Gly	Val	Asp	Gly	Pro	Thr	Leu	335	340	345
Thr	Val	Leu	Ala	Asn	Gln	Thr	Leu	Leu	Val	Glu	Gly	Gln	Val	Ile	350	355	360
Arg	Ser	Pro	Thr	Asn	Thr	Ile	Ser	Val	Tyr	Phe	Arg	Thr	Phe	Gln	365	370	375
Asp	Asp	Gly	Leu	Gly	Thr	Phe	Gln	Leu	His	Tyr	Gln	Ala	Phe	Met	380	385	390
Leu	Ser	Cys	Asn	Phe	Pro	Arg	Arg	Pro	Asp	Ser	Gly	Asp	Val	Thr	395	400	405
Val	Met	Asp	Leu	His	Ser	Gly	Gly	Val	Ala	His	Phe	His	Cys	His	410	415	420
Leu	Gly	Tyr	Glu	Leu	Gln	Gly	Ala	Lys	Met	Leu	Thr	Cys	Ile	Asn	425	430	435
Ala	Ser	Lys	Pro	His	Trp	Ser	Ser	Gln	Glu	Pro	Ile	Cys	Ser	Ala	440	445	450
Pro	Cys	Gly	Gly	Ala	Val	His	Asn	Ala	Thr	Ile	Gly	Arg	Val	Leu			

				455					460					465
Ser	Pro	Ser	Tyr	Pro	Glu	Asn	Thr	Asn	Gly	Ser	Gln	Phe	Cys	Ile
				470					475					480
Trp	Thr	Ile	Glu	Ala	Pro	Glu	Gly	Gln	Lys	Leu	His	Leu	His	Phe
				485					490					495
Glu	Arg	Leu	Leu	Leu	His	Asp	Lys	Asp	Arg	Met	Thr	Val	His	Ser
				500					505					510
Gly	Gln	Thr	Asn	Lys	Ser	Ala	Leu	Leu	Tyr	Asp	Ser	Leu	Gln	Thr
				515					520					525
Glu	Ser	Val	Pro	Phe	Glu	Gly	Leu	Leu	Ser	Glu	Gly	Asn	Thr	Ile
				530					535					540
Arg	Ile	Glu	Phe	Thr	Ser	Asp	Gln	Ala	Arg	Ala	Ala	Ser	Thr	Phe
				545					550					555
Asn	Ile	Arg	Phe	Glu	Ala	Phe	Glu	Lys	Gly	His	Cys	Tyr	Glu	Pro
				560					565					570
Tyr	Ile	Gln	Asn	Gly	Asn	Phe	Thr	Thr	Ser	Asp	Pro	Thr	Tyr	Asn
				575					580					585
Ile	Gly	Thr	Ile	Val	Glu	Phe	Thr	Cys	Asp	Pro	Gly	His	Ser	Leu
				590					595					600
Glu	Gln	Gly	Pro	Ala	Ile	Ile	Glu	Cys	Ile	Asn	Val	Arg	Asp	Pro
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Tyr	Trp	Asn	Asp	Thr	Glu	Pro	Leu	Cys	Arg	Ala	Met	Cys	Gly	Gly
				620					625					630
Glu	Leu	Ser	Ala	Val	Ala	Gly	Val	Val	Leu	Ser	Pro	Asn	Trp	Pro
				635					640					645
Glu	Pro	Tyr	Val	Glu	Gly	Glu	Asp	Cys	Ile	Trp	Lys	Ile	His	Val
				650					655					660
Gly	Glu	Glu	Lys	Arg	Ile	Phe	Leu	Asp	Ile	Gln	Phe	Leu	Asn	Leu
				665					670					675
Ser	Asn	Ser	Asp	Ile	Leu	Thr	Ile	Tyr	Asp	Gly	Asp	Glu	Val	Met
				680					685					690
Pro	His	Ile	Leu	Gly	Gln	Tyr	Leu	Gly	Asn	Ser	Gly	Pro	Gln	Lys
				695					700					705
Leu	Tyr	Ser	Ser	Thr	Pro	Asp	Leu	Thr	Ile	Gln	Phe	His	Ser	Asp
				710					715					720
Pro	Ala	Gly	Leu	Ile	Phe	Gly	Lys	Gly	Gln	Gly	Phe	Ile	Met	Asn
				725					730					735
Tyr	Ile	Glu	Val	Ser	Arg	Asn	Asp	Ser	Cys	Ser	Asp	Leu	Pro	Glu
				740					745					750

Ile	Gln	Asn	Gly	Trp	Lys	Thr	Thr	Ser	His	Thr	Glu	Leu	Val	Arg	
				755					760					765	
Gly	Ala	Arg	Ile	Thr	Tyr	Gln	Cys	Asp	Pro	Gly	Tyr	Asp	Ile	Val	
				770					775					780	
Gly	Ser	Asp	Thr	Leu	Thr	Cys	Gln	Trp	Asp	Leu	Ser	Trp	Ser	Ser	
				785					790					795	
Asp	Pro	Pro	Phe	Cys	Glu	Lys	Ile	Met	Tyr	Cys	Thr	Asp	Pro	Gly	
				800					805					810	
Glu	Val	Asp	His	Ser	Thr	Arg	Leu	Ile	Ser	Asp	Pro	Val	Leu	Leu	
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Val	Gly	Thr	Thr	Ile	Gln	Tyr	Thr	Cys	Asn	Pro	Gly	Phe	Val	Leu	
				830					835					840	
Glu	Gly	Ser	Ser	Leu	Leu	Thr	Cys	Tyr	Ser	Arg	Glu	Thr	Gly	Thr	
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Pro	Ile	Trp	Thr	Ser	Arg	Leu	Pro	His	Cys	Val	Ser	Glu	Glu	Ser	
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Leu	Ala	Cys	Asp	Asn	Pro	Gly	Leu	Pro	Glu	Asn	Gly	Tyr	Gln	Ile	
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Leu	Tyr	Lys	Arg	Leu	Tyr	Leu	Pro	Gly	Glu	Ser	Leu	Thr	Phe	Met	
				890					895					900	
Cys	Tyr	Glu	Gly	Phe	Glu	Leu	Met	Gly	Glu	Val	Thr	Ile	Arg	Cys	
				905					910					915	
Ile	Leu	Gly	Gln	Pro	Ser	His	Trp	Asn	Gly	Pro	Leu	Pro	Val	Cys	
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Lys	Val	Asn	Gln	Asp	Ser	Phe	Glu	His	Ala	Leu	Glu	Ala	Glu	Ala	
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Ala	Ala	Glu	Thr	Ser	Leu	Glu	Gly	Gly	Asn	Met	Ala	Leu	Ala	Ile	
				950					955					960	
Phe	Ile	Pro	Val	Leu	Ile	Ile	Ser	Leu	Leu	Leu	Gly	Gly	Ala	Tyr	
				965					970					975	
Ile	Tyr	Ile	Thr	Arg	Cys	Arg	Tyr	Tyr	Ser	Asn	Leu	Arg	Leu	Pro	
				980					985					990	
Leu	Met	Tyr	Ser	His	Pro	Tyr	Ser	Gln	Ile	Thr	Val	Glu	Thr	Glu	
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Phe	Asp	Asn	Pro	Ile	Tyr	Glu	Thr	Gly	Glu	Thr	Arg	Glu	Tyr	Glu	
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 35 40 45
 Lys Thr Ala Pro Cys Val Arg Leu Leu Asn Ala Thr His Gln Ile
 50 55 60
 Gly Cys Gln Ser Ser Ile Ser Gly Asp Thr Gly Val Ile His Val
 65 70 75
 Val Glu Lys Glu Glu Asp Leu Gln Trp Val Leu Thr Asp Gly Pro
 80 85 90
 Asn Pro Pro Tyr Met Val Leu Leu Glu Ser Lys His Phe Thr Arg
 95 100 105
 Asp Leu Met Glu Lys Leu Lys Gly Arg Thr Ser Arg Ile Ala Gly
 110 115 120
 Leu Ala Val Ser Leu Thr Lys Pro Ser Pro Ala Ser Gly Phe Ser
 125 130 135
 Pro Ser Val Gln Cys Pro Asn Asp Gly Phe Gly Val Tyr Ser Asn
 140 145 150
 Ser Tyr Gly Pro Glu Phe Ala His Cys Arg Glu Ile Gln Trp Asn
 155 160 165
 Ser Leu Gly Asn Gly Leu Ala Tyr Glu Asp Phe Ser Phe Pro Ile
 170 175 180
 Phe Leu Leu Glu Asp Glu Asn Glu Thr Lys Val Ile Lys Gln Cys
 185 190 195
 Tyr Gln Asp His Asn Leu Ser Gln Asn Gly Ser Ala Pro Thr Phe
 200 205 210
 Pro Leu Cys Ala Met Gln Leu Phe Ser His Met His Ala Val Ile
 215 220 225

Ser	Thr	Ala	Thr	Cys	Met	Arg	Arg	Ser	Ser	Ile	Gln	Ser	Thr	Phe
				230					235					240
Ser	Ile	Asn	Pro	Glu	Ile	Val	Cys	Asp	Pro	Leu	Ser	Asp	Tyr	Asn
				245					250					255
Val	Trp	Ser	Met	Leu	Lys	Pro	Ile	Asn	Thr	Thr	Gly	Thr	Leu	Lys
				260					265					270
Pro	Asp	Asp	Arg	Val	Val	Val	Ala	Ala	Thr	Arg	Leu	Asp	Ser	Arg
				275					280					285
Ser	Phe	Phe	Trp	Asn	Val	Ala	Pro	Gly	Ala	Glu	Ser	Ala	Val	Ala
				290					295					300
Ser	Phe	Val	Thr	Gln	Leu	Ala	Ala	Ala	Glu	Ala	Leu	Gln	Lys	Ala
				305					310					315
Pro	Asp	Val	Thr	Thr	Leu	Pro	Arg	Asn	Val	Met	Phe	Val	Phe	Phe
				320					325					330
Gln	Gly	Glu	Thr	Phe	Asp	Tyr	Ile	Gly	Ser	Ser	Arg	Met	Val	Tyr
				335					340					345
Asp	Met	Glu	Lys	Gly	Lys	Phe	Pro	Val	Gln	Leu	Glu	Asn	Val	Asp
				350					355					360
Ser	Phe	Val	Glu	Leu	Gly	Gln	Val	Ala	Leu	Arg	Thr	Ser	Leu	Glu
				365					370					375
Leu	Trp	Met	His	Thr	Asp	Pro	Val	Ser	Gln	Lys	Asn	Glu	Ser	Val
				380					385					390
Arg	Asn	Gln	Val	Glu	Asp	Leu	Leu	Ala	Thr	Leu	Glu	Lys	Ser	Gly
				395					400					405
Ala	Gly	Val	Pro	Ala	Val	Ile	Leu	Arg	Arg	Pro	Asn	Gln	Ser	Gln
				410					415					420
Pro	Leu	Pro	Pro	Ser	Ser	Leu	Gln	Arg	Phe	Leu	Arg	Ala	Arg	Asn
				425					430					435
Ile	Ser	Gly	Val	Val	Leu	Ala	Asp	His	Ser	Gly	Ala	Phe	His	Asn
				440					445					450
Lys	Tyr	Tyr	Gln	Ser	Ile	Tyr	Asp	Thr	Ala	Glu	Asn	Ile	Asn	Val
				455					460					465
Ser	Tyr	Pro	Glu	Trp	Leu	Ser	Pro	Glu	Glu	Asp	Leu	Asn	Phe	Val
				470					475					480
Thr	Asp	Thr	Ala	Lys	Ala	Leu	Ala	Asp	Val	Ala	Thr	Val	Leu	Gly
				485					490					495
Arg	Ala	Leu	Tyr	Glu	Leu	Ala	Gly	Gly	Thr	Asn	Phe	Ser	Asp	Thr
				500					505					510
Val	Gln	Ala	Asp	Pro	Gln	Thr	Val	Thr	Arg	Leu	Leu	Tyr	Gly	Phe

	515		520		525
Leu Ile Lys Ala Asn Asn Ser Trp Phe Gln Ser Ile Leu Arg Gln	530		535		540
Asp Leu Arg Ser Tyr Leu Gly Asp Gly Pro Leu Gln His Tyr Ile	545		550		555
Ala Val Ser Ser Pro Thr Asn Thr Thr Tyr Val Val Gln Tyr Ala	560		565		570
Leu Ala Asn Leu Thr Gly Thr Val Val Asn Leu Thr Arg Glu Gln	575		580		585
Cys Gln Asp Pro Ser Lys Val Pro Ser Glu Asn Lys Asp Leu Tyr	590		595		600
Glu Tyr Ser Trp Val Gln Gly Pro Leu His Ser Asn Glu Thr Asp	605		610		615
Arg Leu Pro Arg Cys Val Arg Ser Thr Ala Arg Leu Ala Arg Ala	620		625		630
Leu Ser Pro Ala Phe Glu Leu Ser Gln Trp Ser Ser Thr Glu Tyr	635		640		645
Ser Thr Trp Thr Glu Ser Arg Trp Lys Asp Ile Arg Ala Arg Ile	650		655		660
Phe Leu Ile Ala Ser Lys Glu Leu Glu Leu Ile Thr Leu Thr Val	665		670		675
Gly Phe Gly Ile Leu Ile Phe Ser Leu Ile Val Thr Tyr Cys Ile	680		685		690
Asn Ala Lys Ala Asp Val Leu Phe Ile Ala Pro Arg Glu Pro Gly	695		700		705
Ala Val Ser Tyr					

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 <211> 2695
 <212> DNA
 <213> Homo Sapien

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 taatttttca ccctgaaggg gagtttgact cgtatgaagt caccattcct 300

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His	Leu	Trp	Pro	Lys	Arg	Leu	Leu	Leu	Pro	Arg	His	Leu	Arg	Val	80	85	90
Phe	Ser	Phe	Thr	Glu	His	Gly	Glu	Leu	Leu	Glu	Asp	His	Pro	Tyr	95	100	105
Ile	Pro	Lys	Asp	Cys	Asn	Tyr	Met	Gly	Ser	Val	Lys	Glu	Ser	Leu	110	115	120
Asp	Ser	Lys	Ala	Thr	Ile	Ser	Thr	Cys	Met	Gly	Gly	Leu	Arg	Gly	125	130	135
Val	Phe	Asn	Ile	Asp	Ala	Lys	His	Tyr	Gln	Ile	Glu	Pro	Leu	Lys	140	145	150
Ala	Ser	Pro	Ser	Phe	Glu	His	Val	Val	Tyr	Leu	Leu	Lys	Lys	Glu	155	160	165
Gln	Phe	Gly	Asn	Gln	Val	Cys	Gly	Leu	Ser	Asp	Asp	Glu	Ile	Glu	170	175	180
Trp	Gln	Met	Ala	Pro	Tyr	Glu	Asn	Lys	Ala	Arg	Leu	Arg	Asp	Phe	185	190	195
Pro	Gly	Ser	Tyr	Lys	His	Pro	Lys	Tyr	Leu	Glu	Leu	Ile	Leu	Leu	200	205	210
Phe	Asp	Gln	Ser	Arg	Tyr	Arg	Phe	Val	Asn	Asn	Asn	Leu	Ser	Gln	215	220	225
Val	Ile	His	Asp	Ala	Ile	Leu	Leu	Thr	Gly	Ile	Met	Asp	Thr	Tyr	230	235	240
Phe	Gln	Asp	Val	Arg	Met	Arg	Ile	His	Leu	Lys	Ala	Leu	Glu	Val	245	250	255
Trp	Thr	Asp	Phe	Asn	Lys	Ile	Arg	Val	Gly	Tyr	Pro	Glu	Leu	Ala	260	265	270
Glu	Val	Leu	Gly	Arg	Phe	Val	Ile	Tyr	Lys	Lys	Ser	Val	Leu	Asn	275	280	285
Ala	Arg	Leu	Ser	Ser	Asp	Trp	Ala	His	Leu	Tyr	Leu	Gln	Arg	Lys	290	295	300
Tyr	Asn	Asp	Ala	Leu	Ala	Trp	Ser	Phe	Gly	Lys	Val	Cys	Ser	Leu	305	310	315
Glu	Tyr	Ala	Gly	Ser	Val	Ser	Thr	Leu	Leu	Asp	Thr	Asn	Ile	Leu	320	325	330
Ala	Pro	Ala	Thr	Trp	Ser	Ala	His	Glu	Leu	Gly	His	Ala	Val	Gly	335	340	345
Met	Ser	His	Asp	Glu	Gln	Tyr	Cys	Gln	Cys	Arg	Gly	Arg	Leu	Asn	350	355	360
Cys	Ile	Met	Gly	Ser	Gly	Arg	Thr	Gly	Phe	Ser	Asn	Cys	Ser	Tyr			

Cys	Glu	Glu	Val	Gly	Tyr	Gly	Gly	Ser	Ile	Asp	Ser	Gly	Pro	Pro	
				665					670					675	
Gly	Leu	Leu	Arg	Gly	Ala	Ile	Pro	Ser	Ser	Ile	Trp	Val	Val	Ser	
				680					685					690	
Ile	Ile	Met	Phe	Arg	Leu	Ile	Leu	Leu	Ile	Leu	Ser	Val	Val	Phe	
				695					700					705	
Val	Phe	Phe	Arg	Gln	Val	Ile	Gly	Asn	His	Leu	Lys	Pro	Lys	Gln	
				710					715					720	
Glu	Lys	Met	Pro	Leu	Ser	Lys	Ala	Lys	Thr	Glu	Gln	Glu	Glu	Ser	
				725					730					735	
Lys	Thr	Lys	Thr	Val	Gln	Glu	Glu	Ser	Lys	Thr	Lys	Thr	Gly	Gln	
				740					745					750	
Glu	Glu	Ser	Glu	Ala	Lys	Thr	Gly	Gln	Glu	Glu	Ser	Lys	Ala	Lys	
				755					760					765	
Thr	Gly	Gln	Glu	Glu	Ser	Lys	Ala	Asn	Ile	Glu	Ser	Lys	Arg	Pro	
				770					775					780	
Lys	Ala	Lys	Ser	Val	Lys	Lys	Gln	Lys	Lys						
				785					790						

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 <211> 2782
 <212> DNA
 <213> Homo Sapien

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 accaccatca tcctggctgg acggagaggg tgacgggggc tgggaagggg 150
 cagctcatgt tcaggtttcc aggaggggct acctgttgac tgtctttgca 200
 ggaagaagaa aacacctgag tgaccagatg tcccagctcc aggtgccttg 250
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 ggtttctgca cacctggaat gactggaacc ccaaagactc aagaaggagc 350
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 catccagtac agactgccaa tgaagaagaa caacaacttg tactcttggg 900
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<211> 616

<212> PRT

<213> Homo Sapien

<400> 206

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Thr	Tyr	Pro	Ala	Leu	Pro	Ser	Lys	Asn	Gly	Lys	Lys	Trp	Glu	Ile
				20					25					30
Leu	Asn	Phe	Asn	Gln	Tyr	Tyr	Glu	Ala	Cys	Arg	Lys	Ala	Ala	Lys
				35					40					45
Ser	Leu	Ile	Lys	Leu	Gly	Leu	Glu	Arg	Phe	His	Gly	Val	Gly	Ile
				50					55					60
Leu	Gly	Phe	Asn	Ser	Ala	Glu	Trp	Phe	Ile	Thr	Ala	Val	Gly	Ala
				65					70					75
Ile	Leu	Ala	Gly	Gly	Leu	Cys	Val	Gly	Ile	Tyr	Ala	Thr	Asn	Ser
				80					85					90
Ala	Glu	Ala	Cys	Gln	Tyr	Val	Ile	Thr	His	Ala	Lys	Val	Asn	Ile
				95					100					105
Leu	Leu	Val	Glu	Asn	Asp	Gln	Gln	Leu	Gln	Lys	Ile	Leu	Ser	Ile
				110					115					120

Pro	Gln	Ser	Ser	Leu	Glu	Pro	Leu	Lys	Ala	Ile	Ile	Gln	Tyr	Arg	
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Leu	Pro	Met	Lys	Lys	Asn	Asn	Asn	Leu	Tyr	Ser	Trp	Asp	Asp	Phe	
				140					145					150	
Met	Glu	Leu	Gly	Arg	Ser	Ile	Pro	Asp	Thr	Gln	Leu	Glu	Gln	Val	
				155					160					165	
Ile	Glu	Ser	Gln	Lys	Ala	Asn	Gln	Cys	Ala	Val	Leu	Ile	Tyr	Thr	
				170					175					180	
Ser	Gly	Thr	Thr	Gly	Ile	Pro	Lys	Gly	Val	Met	Leu	Ser	His	Asp	
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Asn	Ile	Thr	Trp	Ile	Ala	Gly	Ala	Val	Thr	Lys	Asp	Phe	Lys	Leu	
				200					205					210	
Thr	Asp	Lys	His	Glu	Thr	Val	Val	Ser	Tyr	Leu	Pro	Leu	Ser	His	
				215					220					225	
Ile	Ala	Ala	Gln	Met	Met	Asp	Ile	Trp	Val	Pro	Ile	Lys	Ile	Gly	
				230					235					240	
Ala	Leu	Thr	Tyr	Phe	Ala	Gln	Ala	Asp	Ala	Leu	Lys	Gly	Thr	Leu	
				245					250					255	
Val	Ser	Thr	Leu	Lys	Glu	Val	Lys	Pro	Thr	Val	Phe	Ile	Gly	Val	
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Pro	Gln	Ile	Trp	Glu	Lys	Ile	His	Glu	Met	Val	Lys	Lys	Asn	Ser	
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Ala	Lys	Ser	Met	Gly	Leu	Lys	Lys	Lys	Ala	Phe	Val	Trp	Ala	Arg	
				290					295					300	
Asn	Ile	Gly	Phe	Lys	Val	Asn	Ser	Lys	Lys	Met	Leu	Gly	Lys	Tyr	
				305					310					315	
Asn	Thr	Pro	Val	Ser	Tyr	Arg	Met	Ala	Lys	Thr	Leu	Val	Phe	Ser	
				320					325					330	
Lys	Val	Lys	Thr	Ser	Leu	Gly	Leu	Asp	His	Cys	His	Ser	Phe	Ile	
				335					340					345	
Ser	Gly	Thr	Ala	Pro	Leu	Asn	Gln	Glu	Thr	Ala	Glu	Phe	Phe	Leu	
				350					355					360	
Ser	Leu	Asp	Ile	Pro	Ile	Gly	Glu	Leu	Tyr	Gly	Leu	Ser	Glu	Ser	
				365					370					375	
Ser	Gly	Pro	His	Thr	Ile	Ser	Asn	Gln	Asn	Asn	Tyr	Arg	Leu	Leu	
				380					385					390	
Ser	Cys	Gly	Lys	Ile	Leu	Thr	Gly	Cys	Lys	Asn	Met	Leu	Phe	Gln	
				395					400					405	
Gln	Asn	Lys	Asp	Gly	Ile	Gly	Glu	Ile	Cys	Leu	Trp	Gly	Arg	His	

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Ile Phe Met Gly Tyr Leu Glu Ser Glu Thr Glu Thr Thr Glu Ala					
	425		430		435
Ile Asp Asp Glu Gly Trp Leu His Ser Gly Asp Leu Gly Gln Leu					
	440		445		450
Asp Gly Leu Gly Phe Leu Tyr Val Thr Gly His Ile Lys Glu Ile					
	455		460		465
Leu Ile Thr Ala Gly Gly Glu Asn Val Pro Pro Ile Pro Val Glu					
	470		475		480
Thr Leu Val Lys Lys Lys Ile Pro Ile Ile Ser Asn Ala Met Leu					
	485		490		495
Val Gly Asp Lys Leu Lys Phe Leu Ser Met Leu Leu Thr Leu Lys					
	500		505		510
Cys Glu Met Asn Gln Met Ser Gly Glu Pro Leu Asp Lys Leu Asn					
	515		520		525
Phe Glu Ala Ile Asn Phe Cys Arg Gly Leu Gly Ser Gln Ala Ser					
	530		535		540
Thr Val Thr Glu Ile Val Lys Gln Gln Asp Pro Leu Val Tyr Lys					
	545		550		555
Ala Ile Gln Gln Gly Ile Asn Ala Val Asn Gln Glu Ala Met Asn					
	560		565		570
Asn Ala Gln Arg Ile Glu Lys Trp Val Ile Leu Glu Lys Asp Phe					
	575		580		585
Ser Ile Tyr Gly Gly Glu Leu Gly Pro Met Met Lys Leu Lys Arg					
	590		595		600
His Phe Val Ala Gln Lys Tyr Lys Lys Gln Ile Asp His Met Tyr					
	605		610		615

His

<210> 207
 <211> 2845
 <212> DNA
 <213> Homo Sapien

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 <212> PRT
 <213> Homo Sapien

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				320					325					330
Gly	Arg	Thr	His	Val	Gln	Ile	Asp	Pro	Glu	Val	Ile	Asp	Gln	Leu
				335					340					345
Arg	Glu	Phe	Tyr	Arg	Pro	Tyr	Asn	Ile	Lys	Phe	Tyr	Glu	Thr	Val
				350					355					360
Gly	Gln	Asp	Phe	Arg	Trp	Glu								
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 <212> DNA
 <213> Homo Sapien

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 agccgcattt ctcttgggg agactgataa tttaaaagggt ttgttgtgtc 200
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<210> 210
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 <212> PRT
 <213> Homo Sapien

<400> 210
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 35 40 45
 Ile Tyr Leu Gly Phe Leu Val Ser Gln Val Gly Arg Ala Ser Leu
 50 55 60
 Gln His Gly Gln Ala Ala Glu Lys Gly Pro His Arg Ser Arg Asp
 65 70 75
 Thr Ala Glu Pro Ser Phe Pro Glu Ile Pro Leu Asp Gly Thr Leu
 80 85 90
 Ala Pro Pro Glu Ser Gln Gly Asn Gly Ser Thr Leu Gln Pro Asn
 95 100 105
 Val Val Tyr Ile Thr Leu Arg Ser Lys Arg Ser Lys Pro Ala Asn
 110 115 120
 Ile Arg Gly Thr Val Lys Pro Lys Arg Arg Lys Lys His Ala Val
 125 130 135
 Ala Ser Ala Ala Pro Gly Gln Glu Ala Leu Val Gly Pro Ser Leu
 140 145 150
 Gln Pro Gln Glu Ala Ala Arg Glu Ala Asp Ala Val Ala Pro Gly
 155 160 165

Tyr	Ala	Gln	Gly	Ala	Asn	Leu	Val	Lys	Ile	Gly	Glu	Arg	Pro	Trp
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Arg	Leu	Val	Arg	Gly	Pro	Gly	Val	Arg	Ala	Gly	Gly	Pro	Asp	Phe
				185					190					195
Leu	Gln	Pro	Ser	Ser	Arg	Glu	Ser	Asn	Ile	Arg	Ile	Tyr	Ser	Glu
				200					205					210
Ser	Ala	Pro	Ser	Trp	Leu	Ser	Lys	Asp	Asp	Ile	Arg	Arg	Met	Arg
				215					220					225
Leu	Leu	Ala	Asp	Ser	Ala	Val	Ala	Gly	Leu	Arg	Pro	Val	Ser	Ser
				230					235					240
Arg	Ser	Gly	Ala	Arg	Leu	Leu	Val	Leu	Glu	Gly	Gly	Ala	Pro	Gly
				245					250					255
Ala	Val	Leu	Arg	Cys	Gly	Pro	Ser	Pro	Cys	Gly	Leu	Leu	Lys	Gln
				260					265					270
Pro	Leu	Asp	Met	Ser	Glu	Val	Phe	Ala	Phe	His	Leu	Asp	Arg	Ile
				275					280					285
Leu	Gly	Leu	Asn	Arg	Thr	Leu	Pro	Ser	Val	Ser	Arg	Lys	Ala	Glu
				290					295					300
Phe	Ile	Gln	Asp	Gly	Arg	Pro	Cys	Pro	Ile	Ile	Leu	Trp	Asp	Ala
				305					310					315
Ser	Leu	Ser	Ser	Ala	Ser	Asn	Asp	Thr	His	Ser	Ser	Val	Lys	Leu
				320					325					330
Thr	Trp	Gly	Thr	Tyr	Gln	Gln	Leu	Leu	Lys	Gln	Lys	Cys	Trp	Gln
				335					340					345
Asn	Gly	Arg	Val	Pro	Lys	Pro	Glu	Ser	Gly	Cys	Thr	Glu	Ile	His
				350					355					360
His	His	Glu	Trp	Ser	Lys	Met	Ala	Leu	Phe	Asp	Phe	Leu	Leu	Gln
				365					370					375
Ile	Tyr	Asn	Arg	Leu	Asp	Thr	Asn	Cys	Cys	Gly	Phe	Arg	Pro	Arg
				380					385					390
Lys	Glu	Asp	Ala	Cys	Val	Gln	Asn	Gly	Leu	Arg	Pro	Lys	Cys	Asp
				395					400					405
Asp	Gln	Gly	Ser	Ala	Ala	Leu	Ala	His	Ile	Ile	Gln	Arg	Lys	His
				410					415					420
Asp	Pro	Arg	His	Leu	Val	Phe	Ile	Asp	Asn	Lys	Gly	Phe	Phe	Asp
				425					430					435
Arg	Ser	Glu	Asp	Asn	Leu	Asn	Phe	Lys	Leu	Leu	Glu	Gly	Ile	Lys
				440					445					450
Glu	Phe	Pro	Ala	Ser	Ala	Val	Ser	Val	Leu	Lys	Ser	Gln	His	Leu

455	460	465
Arg Gln Lys Leu Leu Gln Ser Leu Phe	Leu Asp Lys Val Tyr Trp	
470	475	480
Glu Ser Gln Gly Gly Arg Gln Gly Ile	Glu Lys Leu Ile Asp Val	
485	490	495
Ile Glu His Arg Ala Lys Ile Leu Ile	Thr Tyr Ile Asn Ala His	
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515		

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 <212> DNA
 <213> Homo Sapien

<400> 211
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 tatttttggt aaggca 3266

<210> 212
 <211> 747
 <212> PRT
 <213> Homo Sapien

<400> 212
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 Pro Arg Ser Ala Leu Tyr Ser Pro Ser Asp Pro Leu Thr Leu Leu
 35 40 45
 Gln Ala Asp Thr Val Arg Gly Ala Val Leu Gly Ser Arg Ser Ala
 50 55 60
 Trp Ala Val Glu Phe Phe Ala Ser Trp Cys Gly His Cys Ile Ala
 65 70 75
 Phe Ala Pro Thr Trp Lys Ala Leu Ala Glu Asp Val Lys Ala Trp

				80					85					90	
Arg	Pro	Ala	Leu	Tyr	Leu	Ala	Ala	Leu	Asp	Cys	Ala	Glu	Glu	Thr	
				95					100					105	
Asn	Ser	Ala	Val	Cys	Arg	Asp	Phe	Asn	Ile	Pro	Gly	Phe	Pro	Thr	
				110					115					120	
Val	Arg	Phe	Phe	Lys	Ala	Phe	Thr	Lys	Asn	Gly	Ser	Gly	Ala	Val	
				125					130					135	
Phe	Pro	Val	Ala	Gly	Ala	Asp	Val	Gln	Thr	Leu	Arg	Glu	Arg	Leu	
				140					145					150	
Ile	Asp	Ala	Leu	Glu	Ser	His	His	Asp	Thr	Trp	Pro	Pro	Ala	Cys	
				155					160					165	
Pro	Pro	Leu	Glu	Pro	Ala	Lys	Leu	Glu	Glu	Ile	Asp	Gly	Phe	Phe	
				170					175					180	
Ala	Arg	Asn	Asn	Glu	Glu	Tyr	Leu	Ala	Leu	Ile	Phe	Glu	Lys	Gly	
				185					190					195	
Gly	Ser	Tyr	Leu	Gly	Arg	Glu	Val	Ala	Leu	Asp	Leu	Ser	Gln	His	
				200					205					210	
Lys	Gly	Val	Ala	Val	Arg	Arg	Val	Leu	Asn	Thr	Glu	Ala	Asn	Val	
				215					220					225	
Val	Arg	Lys	Phe	Gly	Val	Thr	Asp	Phe	Pro	Ser	Cys	Tyr	Leu	Leu	
				230					235					240	
Phe	Arg	Asn	Gly	Ser	Val	Ser	Arg	Val	Pro	Val	Leu	Met	Glu	Ser	
				245					250					255	
Arg	Ser	Phe	Tyr	Thr	Ala	Tyr	Leu	Gln	Arg	Leu	Ser	Gly	Leu	Thr	
				260					265					270	
Arg	Glu	Ala	Ala	Gln	Thr	Thr	Val	Ala	Pro	Thr	Thr	Ala	Asn	Lys	
				275					280					285	
Ile	Ala	Pro	Thr	Val	Trp	Lys	Leu	Ala	Asp	Arg	Ser	Lys	Ile	Tyr	
				290					295					300	
Met	Ala	Asp	Leu	Glu	Ser	Ala	Leu	His	Tyr	Ile	Leu	Arg	Ile	Glu	
				305					310					315	
Val	Gly	Arg	Phe	Pro	Val	Leu	Glu	Gly	Gln	Arg	Leu	Val	Ala	Leu	
				320					325					330	
Lys	Lys	Phe	Val	Ala	Val	Leu	Ala	Lys	Tyr	Phe	Pro	Gly	Arg	Pro	
				335					340					345	
Leu	Val	Gln	Asn	Phe	Leu	His	Ser	Val	Asn	Glu	Trp	Leu	Lys	Arg	
				350					355					360	
Gln	Lys	Arg	Asn	Lys	Ile	Pro	Tyr	Ser	Phe	Phe	Lys	Thr	Ala	Leu	
				365					370					375	

Asp	Asp	Arg	Lys	Glu	Gly	Ala	Val	Leu	Ala	Lys	Lys	Val	Asn	Trp	380	385	390
Ile	Gly	Cys	Gln	Gly	Ser	Glu	Pro	His	Phe	Arg	Gly	Phe	Pro	Cys	395	400	405
Ser	Leu	Trp	Val	Leu	Phe	His	Phe	Leu	Thr	Val	Gln	Ala	Ala	Arg	410	415	420
Gln	Asn	Val	Asp	His	Ser	Gln	Glu	Ala	Ala	Lys	Ala	Lys	Glu	Val	425	430	435
Leu	Pro	Ala	Ile	Arg	Gly	Tyr	Val	His	Tyr	Phe	Phe	Gly	Cys	Arg	440	445	450
Asp	Cys	Ala	Ser	His	Phe	Glu	Gln	Met	Ala	Ala	Ala	Ser	Met	His	455	460	465
Arg	Val	Gly	Ser	Pro	Asn	Ala	Ala	Val	Leu	Trp	Leu	Trp	Ser	Ser	470	475	480
His	Asn	Arg	Val	Asn	Ala	Arg	Leu	Ala	Gly	Ala	Pro	Ser	Glu	Asp	485	490	495
Pro	Gln	Phe	Pro	Lys	Val	Gln	Trp	Pro	Pro	Arg	Glu	Leu	Cys	Ser	500	505	510
Ala	Cys	His	Asn	Glu	Arg	Leu	Asp	Val	Pro	Val	Trp	Asp	Val	Glu	515	520	525
Ala	Thr	Leu	Asn	Phe	Leu	Lys	Ala	His	Phe	Ser	Pro	Ser	Asn	Ile	530	535	540
Ile	Leu	Asp	Phe	Pro	Ala	Ala	Gly	Ser	Ala	Ala	Arg	Arg	Asp	Val	545	550	555
Gln	Asn	Val	Ala	Ala	Ala	Pro	Glu	Leu	Ala	Met	Gly	Ala	Leu	Glu	560	565	570
Leu	Glu	Ser	Arg	Asn	Ser	Thr	Leu	Asp	Pro	Gly	Lys	Pro	Glu	Met	575	580	585
Met	Lys	Ser	Pro	Thr	Asn	Thr	Thr	Pro	His	Val	Pro	Ala	Glu	Gly	590	595	600
Pro	Glu	Ala	Ser	Arg	Pro	Pro	Lys	Leu	His	Pro	Gly	Leu	Arg	Ala	605	610	615
Ala	Pro	Gly	Gln	Glu	Pro	Pro	Glu	His	Met	Ala	Glu	Leu	Gln	Arg	620	625	630
Asn	Glu	Gln	Glu	Gln	Pro	Leu	Gly	Gln	Trp	His	Leu	Ser	Lys	Arg	635	640	645
Asp	Thr	Gly	Ala	Ala	Leu	Leu	Ala	Glu	Ser	Arg	Ala	Glu	Lys	Asn	650	655	660
Arg	Leu	Trp	Gly	Pro	Leu	Glu	Val	Arg	Arg	Val	Gly	Arg	Ser	Ser			

	665		670		675
Lys Gln Leu Val Asp Ile Pro Glu Gly Gln Leu Glu Ala Arg Ala					
	680		685		690
Gly Arg Gly Arg Gly Gln Trp Leu Gln Val Leu Gly Gly Gly Phe					
	695		700		705
Ser Tyr Leu Asp Ile Ser Leu Cys Val Gly Leu Tyr Ser Leu Ser					
	710		715		720
Phe Met Gly Leu Leu Ala Met Tyr Thr Tyr Phe Gln Ala Lys Ile					
	725		730		735
Arg Ala Leu Lys Gly His Ala Gly His Pro Ala Ala					
	740		745		

<210> 213
 <211> 1955
 <212> DNA
 <213> Homo Sapien

<400> 213
 gcacgaggcc gacttccaga ccattctacaa ctgcacggcc tggaacagct 50
 tcggctccga cactgagatc atccgggtca aggagcaagg ttcggaaatg 100
 aagtcgggag ccgggctgga agcagagtct gtgccgatgg ccgtcatcat 150
 tggggtggcc gtaggagctg gtgtggcctt cctcgtcctt atggcaacca 200
 tcgtggcggt ctgctgtgcc cgttcccaga gaaatctcaa aggtgttgtg 250
 tcagccaaaa atgatatccg agtggaatt gtccacaagg aaccagcctc 300
 tggtcgggag ggtgaggagc actccaccat caagcagctg atgatggacc 350
 ggggtgaatt ccagcaagac tcagtcctga aacagctgga ggtcctcaaa 400
 gaagaggaga aagagtttca gaacctgaag gacccacca atggctacta 450
 cagcgtcaac accttcaaag agcaccactc aaccccgacc atctccctct 500
 ccagctgcca gcccgacctg cgtcctgcgg gtaagcagcg tgtgcccaca 550
 ggcattgtcct tcaccaacat ctacagcacc ctgagcggcc agggccgcct 600
 ctacgactac gggcagcggg ttgtgctggg catgggcagc tcgtccatcg 650
 agctttgtga gcgggagttc cagagaggct ccctcagcga cagcagctcc 700
 ttcttgga caagcagtgga cagcagcgtc agcagcagcg gcaagcagga 750
 tggctatgtg cagttcgaca aggccagcaa ggcttctgct tctcctccc 800
 accactcca gtctcgtcc cagaactctg accccagtcg acccctgcag 850
 cggcggatgc agactcacgt ctaaggatca cacaccgcgg gtggggacgg 900

gccaggggaag aggtcagggc acgttctggt tgtccagggga cgaggggtac 950
 tttgcagagg acaccagaat tggccacttc caggacagcc tcccagcgcc 1000
 tctgccactg ccttccttcg aagctctgat caagcacaaa tctgggtccc 1050
 caggtgctgt gtgccagagg tgggcgggtg gggagacaga cagaggctgc 1100
 ggctgagtgc gctgtgctta gtgctggaca cccgtgtccc cggccctttc 1150
 ctggaggccc ctctaccacc tgctctgccc acaggcacaa gtggcagcta 1200
 taactctgct ttcataaagc tgcgggtccac tctctggtct ctctgtgggc 1250
 tctacccttc actgaccaca agctctacct acccctgtgc ctgtgctccc 1300
 atacagccct ggggagaagg ggatgacgtc tcccagcac tgagctgccc 1350
 cagaaacccc ggctccccac tgctgctcat agccataacc ctggaggctg 1400
 acaagccaga aatggccttg gctaaaggag cctctctctc accaggctgg 1450
 ccgggagccc accccaatt tgtttggtgt tttgtgtcca tactcttgca 1500
 gttctgtcct tggacttgat gccgctgaac tctgcggtgg gaccggtccc 1550
 gtcagagcct ggtgtactgg ggggagggag ggaggaggga gcctgtgctg 1600
 acggagcacc tcgccgggtg tgcccctcct gggctgtgtg accccagcct 1650
 cccacccac ctctgcttt gtgtactcct cccctcccc tcagcacaat 1700
 cggagttcat ataagaagtg cgggagcttc tctggtcagg gttctctgaa 1750
 cacttatgga gagagtgctt cctgggaagt gtggcgtttg aaggggctgg 1800
 agggcaggtc tttaagatgg cgagactgcc cttctcagct gataaacaca 1850
 agaacggcga tcctgtcttc agtaaggctc cacgagaaga gaggaagtat 1900
 atctacacct caaccctcct agtcaccacc tgaaataaat gttagggaaa 1950
 aaaaa 1955

<210> 214
 <211> 245
 <212> PRT
 <213> Homo Sapien

<400> 214
 Met Ala Val Ile Ile Gly Val Ala Val Gly Ala Gly Val Ala Phe
 1 5 10 15
 Leu Val Leu Met Ala Thr Ile Val Ala Phe Cys Cys Ala Arg Ser
 20 25 30
 Gln Arg Asn Leu Lys Gly Val Val Ser Ala Lys Asn Asp Ile Arg
 35 40 45

Val	Glu	Ile	Val	His	Lys	Glu	Pro	Ala	Ser	Gly	Arg	Glu	Gly	Glu	
				50					55					60	
Glu	His	Ser	Thr	Ile	Lys	Gln	Leu	Met	Met	Asp	Arg	Gly	Glu	Phe	
				65					70					75	
Gln	Gln	Asp	Ser	Val	Leu	Lys	Gln	Leu	Glu	Val	Leu	Lys	Glu	Glu	
				80					85					90	
Glu	Lys	Glu	Phe	Gln	Asn	Leu	Lys	Asp	Pro	Thr	Asn	Gly	Tyr	Tyr	
				95					100					105	
Ser	Val	Asn	Thr	Phe	Lys	Glu	His	His	Ser	Thr	Pro	Thr	Ile	Ser	
				110					115					120	
Leu	Ser	Ser	Cys	Gln	Pro	Asp	Leu	Arg	Pro	Ala	Gly	Lys	Gln	Arg	
				125					130					135	
Val	Pro	Thr	Gly	Met	Ser	Phe	Thr	Asn	Ile	Tyr	Ser	Thr	Leu	Ser	
				140					145					150	
Gly	Gln	Gly	Arg	Leu	Tyr	Asp	Tyr	Gly	Gln	Arg	Phe	Val	Leu	Gly	
				155					160					165	
Met	Gly	Ser	Ser	Ser	Ile	Glu	Leu	Cys	Glu	Arg	Glu	Phe	Gln	Arg	
				170					175					180	
Gly	Ser	Leu	Ser	Asp	Ser	Ser	Ser	Phe	Leu	Asp	Thr	Gln	Cys	Asp	
				185					190					195	
Ser	Ser	Val	Ser	Ser	Ser	Gly	Lys	Gln	Asp	Gly	Tyr	Val	Gln	Phe	
				200					205					210	
Asp	Lys	Ala	Ser	Lys	Ala	Ser	Ala	Ser	Ser	Ser	His	His	Ser	Gln	
				215					220					225	
Ser	Ser	Ser	Gln	Asn	Ser	Asp	Pro	Ser	Arg	Pro	Leu	Gln	Arg	Arg	
				230					235					240	
Met	Gln	Thr	His	Val											
				245											

<210> 215
 <211> 1567
 <212> DNA
 <213> Homo Sapien

<400> 215
 cagccttcct cccccagcct gagtgactac tctattcctt ggtccctgct 50
 attgtcgggg acgattgcat gggctacgcc aggaaagtag gctgggtgac 100
 cgcaggcctg gtgattgggg ctggcgccctg ctattgcatt tatagactga 150
 ctaggggaag aaaacagaac aaggaaaaaa tggctgaggg tggatctggg 200
 gatgtggatg atgctgggga ctgttctggg gccaggtata atgactgggc 250

tgatgatgat gatgacagca atgagagcaa gagtatagta tggtagccac 300
 cttgggctcg gattgggact gaagctggaa ccagagctag ggccagggca 350
 agggccaggg ctacccgggc acgtcgggct gtccagaaac gggcttcccc 400
 caattcagat gataccgttt tgtccctca agagctacaa aagggttcttt 450
 gcttggttga gatgtctgaa aagccttata ttcttgaagc agctttaatt 500
 gctctgggta acaatgctgc ttatgcattt aacagagata ttattcgtga 550
 tctgggtggt ctcccaattg tcgcaaagat tctcaatact cgggatccca 600
 tagttaagga aaaggcttta attgtcctga ataacttgag tgtgaatgct 650
 gaaaatcagc gcaggcttaa agtatacatg aatcaagtgt gtgatgacac 700
 aatcacttct cgcttgaact catctgtgca gcttgctgga ctgagattgc 750
 ttacaaatat gactgttact aatgagtatc agcacatgct tgctaattcc 800
 atttctgact tttttcgttt attttcagcg ggaaatgaag aaaccaaact 850
 tcaggttctg aaactccttt tgaatttggc tgaaaatcca gccatgacta 900
 gggaactgct cagggcccaa gtaccatctt cactgggctc cctctttaat 950
 aagaaggaga acaaagaagt tattcttaaa cttctggtca tatttgagaa 1000
 cataaatgat aatttcaa at gggaagaaaa tgaacctact cagaatcaat 1050
 tcggtgaagg ttcacttttt ttctttttta aagaatttca agtgtgtgct 1100
 gataagggtc tgggaataga aagtcaccat gatttttttg tgaaagtaaa 1150
 agttggaaaa ttcattggcca aacttgctga acatatgttc ccaaagagcc 1200
 aggaataaca ccttgatttt gtaatttaga agcaacacac attgtaaact 1250
 attcattttc tccaccttgt ttatatggta aaggaatcct ttcagctgcc 1300
 agttttgaat aatgaatatc atattgtatc atcaatgctg atatttaact 1350
 gagttggtct ttaggtttta gatggataaa tgaatatcac tacttgttct 1400
 gaaaacatgt ttgttgcttt ttatctcgct gcctagattg aaatattttg 1450
 ctatttcttc tgcataagt acagtgaacc aattcatcat gagtaagctc 1500
 ccttctgtca ttttcattga ttttaatttgt gtatcatcaa taaaattgta 1550
 tgttaatgct ggaaaga 1567

<210> 216
 <211> 379
 <212> PRT
 <213> Homo Sapien

<400> 216

Met	Gly	Tyr	Ala	Arg	Lys	Val	Gly	Trp	Val	Thr	Ala	Gly	Leu	Val
1				5					10					15
Ile	Gly	Ala	Gly	Ala	Cys	Tyr	Cys	Ile	Tyr	Arg	Leu	Thr	Arg	Gly
				20					25					30
Arg	Lys	Gln	Asn	Lys	Glu	Lys	Met	Ala	Glu	Gly	Gly	Ser	Gly	Asp
				35					40					45
Val	Asp	Asp	Ala	Gly	Asp	Cys	Ser	Gly	Ala	Arg	Tyr	Asn	Asp	Trp
				50					55					60
Ser	Asp	Asp	Asp	Asp	Asp	Ser	Asn	Glu	Ser	Lys	Ser	Ile	Val	Trp
				65					70					75
Tyr	Pro	Pro	Trp	Ala	Arg	Ile	Gly	Thr	Glu	Ala	Gly	Thr	Arg	Ala
				80					85					90
Arg	Ala	Arg	Ala	Arg	Ala	Arg	Ala	Thr	Arg	Ala	Arg	Arg	Ala	Val
				95					100					105
Gln	Lys	Arg	Ala	Ser	Pro	Asn	Ser	Asp	Asp	Thr	Val	Leu	Ser	Pro
				110					115					120
Gln	Glu	Leu	Gln	Lys	Val	Leu	Cys	Leu	Val	Glu	Met	Ser	Glu	Lys
				125					130					135
Pro	Tyr	Ile	Leu	Glu	Ala	Ala	Leu	Ile	Ala	Leu	Gly	Asn	Asn	Ala
				140					145					150
Ala	Tyr	Ala	Phe	Asn	Arg	Asp	Ile	Ile	Arg	Asp	Leu	Gly	Gly	Leu
				155					160					165
Pro	Ile	Val	Ala	Lys	Ile	Leu	Asn	Thr	Arg	Asp	Pro	Ile	Val	Lys
				170					175					180
Glu	Lys	Ala	Leu	Ile	Val	Leu	Asn	Asn	Leu	Ser	Val	Asn	Ala	Glu
				185					190					195
Asn	Gln	Arg	Arg	Leu	Lys	Val	Tyr	Met	Asn	Gln	Val	Cys	Asp	Asp
				200					205					210
Thr	Ile	Thr	Ser	Arg	Leu	Asn	Ser	Ser	Val	Gln	Leu	Ala	Gly	Leu
				215					220					225
Arg	Leu	Leu	Thr	Asn	Met	Thr	Val	Thr	Asn	Glu	Tyr	Gln	His	Met
				230					235					240
Leu	Ala	Asn	Ser	Ile	Ser	Asp	Phe	Phe	Arg	Leu	Phe	Ser	Ala	Gly
				245					250					255
Asn	Glu	Glu	Thr	Lys	Leu	Gln	Val	Leu	Lys	Leu	Leu	Leu	Asn	Leu
				260					265					270
Ala	Glu	Asn	Pro	Ala	Met	Thr	Arg	Glu	Leu	Leu	Arg	Ala	Gln	Val
				275					280					285

Pro	Ser	Ser	Leu	Gly	Ser	Leu	Phe	Asn	Lys	Lys	Glu	Asn	Lys	Glu
				290					295					300
Val	Ile	Leu	Lys	Leu	Leu	Val	Ile	Phe	Glu	Asn	Ile	Asn	Asp	Asn
				305					310					315
Phe	Lys	Trp	Glu	Glu	Asn	Glu	Pro	Thr	Gln	Asn	Gln	Phe	Gly	Glu
				320					325					330
Gly	Ser	Leu	Phe	Phe	Phe	Leu	Lys	Glu	Phe	Gln	Val	Cys	Ala	Asp
				335					340					345
Lys	Val	Leu	Gly	Ile	Glu	Ser	His	His	Asp	Phe	Leu	Val	Lys	Val
				350					355					360
Lys	Val	Gly	Lys	Phe	Met	Ala	Lys	Leu	Ala	Glu	His	Met	Phe	Pro
				365					370					375

Lys Ser Gln Glu

<210> 217
 <211> 1633
 <212> DNA
 <213> Homo Sapien

<400> 217
 gagacacaaa ggcaggcggg atgcgggagc aggcaaagg aaagcgaaag 50
 ccgcgcgccc ggccggtgac tgggtgaagg cgcgcgcag ctttcccgac 100
 gccggctgta cccggacctc ctggctgagc ctggcgcgcc gcagccatgg 150
 ccatcgctca actggccacg gactacgtgt tctcggattt cttgctgaag 200
 gagcccacgg agcccaagtt caaggggctg cgactggagc tggctgtgga 250
 caagatggtc acgtgcattg cgggtggggct gccctgctg ctcactctgc 300
 tggccttcgc gcaggagatc tcgattggta cacagataag ctgtttctct 350
 ccaagttctt tctcctggcg tcaggctgcc tttgtggatt catattgctg 400
 ggcggctggt cagcagaaga actcactgca gagcgagtct ggaaacctcc 450
 cactgtggct gcataagttt ttccctaca tcctgctgct ctttgcgatc 500
 ctctgtacc tgccccgct gttctggcgt ttgcagctg ctctcatat 550
 ttgctcagac ttgaagttta tcatggaaga acttgacaaa gtttacaacc 600
 gtgcaattaa ggctgcaaag agtgcgcgtg accttgacat gagagatgga 650
 gcctgctcag ttccaggtgt taccgagaac ttagggcaaa gtttgtggga 700
 ggtatctgaa agccacttca agtacccaat tgtggagcag tacttgaaga 750
 caaagaaaaa ttctaataat ttaatcatca agtacattag ctgccgcctg 800

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ctgacactca tcattatact gttagcgtgt atctacctgg gctattactt 850
cagcctctcc tcactctcag acgagtttgt gtgcagcatc aaatcaggga 900
tcctgagaaa cgacagcacc gtgcccgatc agtttcagtg caaactcatt 950
gccgtgggca tcttccagtt gctcagtgtc attaaccttg tggtttatgt 1000
cctgctggct cccgtgggtg tctacacgct gtttgttcca ttccgacaga 1050
agacagatgt tctcaaagtg tacgaaatcc tccccacttt tgatgttctg 1100
catttcaaat ctgaagggtg caacgatttg agcctctaca atctcttctt 1150
ggaggaaaat ataagtgagg tcaagtcata caagtgtctt aagggtactgg 1200
agaatattaa gagcagtggt caggggatcg acccaatgct actcctgaca 1250
aaccttggca tgatcaagat ggatgttggt gatggcaaaa ctcccatgtc 1300
tgcagagatg agagaggagc aggggaacca gacggcagag ctccaaggta 1350
tgaacataga cagtgaaact aaagcaaata atggagagaa gaatgccga 1400
cagagacttc tggattcttc ttgctgatga ttttttttcc ttgagctgta 1450
aatctgtgac ttctgcgaca tgggatttaa tttggctaaa gcacccctgt 1500
tggtttcaca gctggtttgc aataaatggt tcttggtgga aaaaaaaaaa 1550
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1600
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 1633

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<210> 218
<211> 426
<212> PRT
<213> Homo Sapien

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<400> 218
Met Ala Ile Ala Gln Leu Ala Thr Glu Tyr Val Phe Ser Asp Phe
  1             5             10            15

Leu Leu Lys Glu Pro Thr Glu Pro Lys Phe Lys Gly Leu Arg Leu
          20             25            30

Glu Leu Ala Val Asp Lys Met Val Thr Cys Ile Ala Val Gly Leu
          35             40            45

Pro Leu Leu Leu Ile Ser Leu Ala Phe Ala Gln Glu Ile Ser Ile
          50             55            60

Gly Thr Gln Ile Ser Cys Phe Ser Pro Ser Ser Phe Ser Trp Arg
          65             70            75

Gln Ala Ala Phe Val Asp Ser Tyr Cys Trp Ala Ala Val Gln Gln
          80             85            90

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Lys	Asn	Ser	Leu	Gln	Ser	Glu	Ser	Gly	Asn	Leu	Pro	Leu	Trp	Leu	95	100	105
His	Lys	Phe	Phe	Pro	Tyr	Ile	Leu	Leu	Leu	Phe	Ala	Ile	Leu	Leu	110	115	120
Tyr	Leu	Pro	Pro	Leu	Phe	Trp	Arg	Phe	Ala	Ala	Ala	Pro	His	Ile	125	130	135
Cys	Ser	Asp	Leu	Lys	Phe	Ile	Met	Glu	Glu	Leu	Asp	Lys	Val	Tyr	140	145	150
Asn	Arg	Ala	Ile	Lys	Ala	Ala	Lys	Ser	Ala	Arg	Asp	Leu	Asp	Met	155	160	165
Arg	Asp	Gly	Ala	Cys	Ser	Val	Pro	Gly	Val	Thr	Glu	Asn	Leu	Gly	170	175	180
Gln	Ser	Leu	Trp	Glu	Val	Ser	Glu	Ser	His	Phe	Lys	Tyr	Pro	Ile	185	190	195
Val	Glu	Gln	Tyr	Leu	Lys	Thr	Lys	Lys	Asn	Ser	Asn	Asn	Leu	Ile	200	205	210
Ile	Lys	Tyr	Ile	Ser	Cys	Arg	Leu	Leu	Thr	Leu	Ile	Ile	Ile	Leu	215	220	225
Leu	Ala	Cys	Ile	Tyr	Leu	Gly	Tyr	Tyr	Phe	Ser	Leu	Ser	Ser	Leu	230	235	240
Ser	Asp	Glu	Phe	Val	Cys	Ser	Ile	Lys	Ser	Gly	Ile	Leu	Arg	Asn	245	250	255
Asp	Ser	Thr	Val	Pro	Asp	Gln	Phe	Gln	Cys	Lys	Leu	Ile	Ala	Val	260	265	270
Gly	Ile	Phe	Gln	Leu	Leu	Ser	Val	Ile	Asn	Leu	Val	Val	Tyr	Val	275	280	285
Leu	Leu	Ala	Pro	Val	Val	Val	Tyr	Thr	Leu	Phe	Val	Pro	Phe	Arg	290	295	300
Gln	Lys	Thr	Asp	Val	Leu	Lys	Val	Tyr	Glu	Ile	Leu	Pro	Thr	Phe	305	310	315
Asp	Val	Leu	His	Phe	Lys	Ser	Glu	Gly	Tyr	Asn	Asp	Leu	Ser	Leu	320	325	330
Tyr	Asn	Leu	Phe	Leu	Glu	Glu	Asn	Ile	Ser	Glu	Val	Lys	Ser	Tyr	335	340	345
Lys	Cys	Leu	Lys	Val	Leu	Glu	Asn	Ile	Lys	Ser	Ser	Gly	Gln	Gly	350	355	360
Ile	Asp	Pro	Met	Leu	Leu	Leu	Thr	Asn	Leu	Gly	Met	Ile	Lys	Met	365	370	375
Asp	Val	Val	Asp	Gly	Lys	Thr	Pro	Met	Ser	Ala	Glu	Met	Arg	Glu			

	380		385		390
Glu Gln Gly Asn Gln Thr Ala Glu Leu Gln Gly Met Asn Ile Asp					
	395		400		405
Ser Glu Thr Lys Ala Asn Asn Gly Glu Lys Asn Ala Arg Gln Arg					
	410		415		420
Leu Leu Asp Ser Ser Cys					
	425				

<210> 219
 <211> 1076
 <212> PRT
 <213> Homo Sapien

<400> 219

Cys Thr Gly Thr Gly Ala Gly Thr Gly Ala Cys Ala Cys Ala Cys					
1	5			10	15
Gly Cys Thr Gly Ala Gly Thr Gly Gly Gly Gly Thr Gly Ala Ala					
	20			25	30
Gly Gly Gly Ala Ala Ala Thr Gly Cys Thr Gly Gly Thr Gly Ala					
	35			40	45
Ala Thr Thr Thr Cys Ala Thr Thr Thr Thr Gly Ala Gly Gly Thr					
	50			55	60
Gly Thr Gly Gly Gly Thr Thr Gly Cys Thr Gly Thr Thr Ala Gly					
	65			70	75
Thr Cys Ala Cys Thr Cys Thr Gly Thr Cys Thr Cys Thr Thr Gly					
	80			85	90
Cys Cys Ala Thr Thr Gly Cys Cys Ala Ala Gly Cys Ala Cys Ala					
	95			100	105
Ala Gly Cys Ala Ala Thr Cys Thr Thr Cys Cys Thr Thr Cys Ala					
	110			115	120
Cys Cys Ala Ala Ala Ala Gly Thr Thr Gly Thr Thr Ala Cys Cys					
	125			130	135
Cys Ala Ala Gly Gly Gly Gly Ala Ala Cys Ala Thr Thr Gly Thr					
	140			145	150
Cys Cys Cys Ala Ala Gly Cys Thr Gly Thr Thr Gly Ala Cys Gly					
	155			160	165
Cys Thr Cys Thr Cys Thr Ala Thr Ala Thr Cys Ala Ala Ala Gly					
	170			175	180
Cys Ala Gly Cys Ala Thr Gly Gly Cys Thr Cys Ala Ala Ala Gly					
	185			190	195
Cys Ala Ala Cys Gly Ala Thr Thr Cys Cys Ala Gly Ala Ala Gly					
	200			205	210

Ala Cys Cys Gly Cys Ala Thr Ala Ala Ala Ala Ala Thr Ala	215	220	225
Thr Ala Cys Gly Ala Thr Thr Ala Thr Thr Ala Ala Ala Ala Ala	230	235	240
Ala Gly Ala Ala Ala Ala Cys Ala Ala Ala Ala Ala Gly Cys	245	250	255
Ala Gly Thr Thr Thr Ala Thr Gly Ala Ala Ala Ala Ala Cys Thr	260	265	270
Gly Thr Cys Ala Ala Thr Thr Thr Cys Ala Ala Gly Ala Ala Cys	275	280	285
Ala Gly Cys Thr Thr Cys Thr Gly Thr Cys Cys Thr Thr Cys Thr	290	295	300
Thr Cys Ala Thr Gly Gly Ala Ala Gly Ala Cys Gly Thr Thr Thr	305	310	315
Thr Thr Gly Gly Thr Cys Ala Ala Cys Thr Gly Cys Ala Ala Thr	320	325	330
Thr Gly Cys Ala Ala Gly Gly Cys Thr Gly Cys Ala Ala Gly Ala	335	340	345
Ala Ala Ala Thr Ala Cys Gly Cys Thr Thr Thr Gly Thr Gly Gly	350	355	360
Ala Gly Gly Ala Cys Thr Thr Thr Cys Ala Thr Ala Gly Cys Cys	365	370	375
Thr Thr Ala Gly Gly Cys Ala Gly Ala Ala Ala Thr Thr Gly Ala	380	385	390
Gly Cys Cys Ala Cys Thr Gly Thr Ala Thr Thr Thr Cys Cys Thr	395	400	405
Gly Thr Gly Cys Thr Thr Cys Ala Thr Cys Ala Gly Cys Thr Ala	410	415	420
Gly Ala Gly Ala Gly Ala Thr Gly Ala Ala Ala Thr Cys Cys Ala	425	430	435
Thr Thr Ala Cys Cys Ala Gly Gly Ala Thr Gly Ala Ala Ala Ala	440	445	450
Gly Ala Ala Thr Ala Thr Thr Thr Thr Ala Thr Ala Gly Gly Ala	455	460	465
Thr Thr Gly Gly Ala Ala Ala Cys Ala Ala Ala Gly Gly Ala Ala	470	475	480
Thr Cys Thr Ala Cys Ala Ala Ala Gly Cys Cys Ala Thr Cys Ala	485	490	495
Gly Thr Gly Ala Ala Cys Thr Gly Gly Ala Thr Ala Thr Thr Cys			

Ala Gly Thr Ala Cys Ala Thr Thr Gly Thr Gly Thr Cys Ala Ala	800	805	810
Cys Thr Thr Ala Ala Thr Thr Thr Ala Ala Ala Gly Thr Ala Thr	815	820	825
Gly Thr Ala Ala Cys Cys Thr Gly Ala Ala Thr Thr Ala Ala Cys	830	835	840
Thr Cys Gly Thr Gly Thr Ala Ala Thr Ala Thr Thr Thr Gly Thr	845	850	855
Gly Thr Gly Thr Gly Gly Ala Gly Thr Gly Gly Gly Ala Thr Gly	860	865	870
Thr Gly Gly Gly Gly Gly Gly Thr Gly Gly Ala Gly Gly Gly Gly	875	880	885
Gly Ala Ala Thr Gly Ala Cys Ala Gly Ala Thr Thr Thr Cys Thr	890	895	900
Gly Gly Ala Ala Thr Gly Cys Ala Ala Thr Gly Thr Ala Ala Thr	905	910	915
Gly Thr Thr Ala Cys Thr Gly Ala Gly Ala Cys Thr Thr Ala Ala	920	925	930
Ala Thr Ala Gly Ala Thr Gly Thr Thr Ala Thr Gly Thr Ala Thr	935	940	945
Ala Thr Gly Ala Thr Thr Gly Thr Cys Thr Gly Thr Thr Thr Ala	950	955	960
Ala Gly Thr Gly Thr Thr Thr Gly Ala Ala Ala Ala Thr Thr Gly	965	970	975
Thr Thr Ala Ala Thr Thr Ala Thr Gly Cys Cys Cys Ala Gly Thr	980	985	990
Gly Thr Gly Ala Ala Cys Thr Thr Ala Gly Thr Ala Cys Thr Thr	995	1000	1005
Ala Ala Cys Ala Cys Ala Thr Thr Thr Thr Gly Ala Thr Thr Thr	1010	1015	1020
Thr Ala Ala Thr Thr Ala Ala Ala Thr Ala Ala Ala Thr Thr Gly	1025	1030	1035
Gly Gly Thr Thr Thr Cys Cys Thr Thr Cys Thr Cys Ala Ala Ala	1040	1045	1050
Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala	1055	1060	1065
Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala	1070	1075	

<210> 220

<211> 171
 <212> PRT
 <213> Homo Sapien

<400> 220
 Met Leu Val Asn Phe Ile Leu Arg Cys Gly Leu Leu Leu Val Thr
 1 5 10 15
 Leu Ser Leu Ala Ile Ala Lys His Lys Gln Ser Ser Phe Thr Lys
 20 25 30
 Ser Cys Tyr Pro Arg Gly Thr Leu Ser Gln Ala Val Asp Ala Leu
 35 40 45
 Tyr Ile Lys Ala Ala Trp Leu Lys Ala Thr Ile Pro Glu Asp Arg
 50 55 60
 Ile Lys Asn Ile Arg Leu Leu Lys Lys Lys Thr Lys Lys Gln Phe
 65 70 75
 Met Lys Asn Cys Gln Phe Gln Glu Gln Leu Leu Ser Phe Phe Met
 80 85 90
 Glu Asp Val Phe Gly Gln Leu Gln Leu Gln Gly Cys Lys Lys Ile
 95 100 105
 Arg Phe Val Glu Asp Phe His Ser Leu Arg Gln Lys Leu Ser His
 110 115 120
 Cys Ile Ser Cys Ala Ser Ser Ala Arg Glu Met Lys Ser Ile Thr
 125 130 135
 Arg Met Lys Arg Ile Phe Tyr Arg Ile Gly Asn Lys Gly Ile Tyr
 140 145 150
 Lys Ala Ile Ser Glu Leu Asp Ile Leu Leu Ser Trp Ile Lys Lys
 155 160 165
 Leu Leu Glu Ser Ser Gln
 170

<210> 221
 <211> 1129
 <212> DNA
 <213> Homo Sapien

<400> 221
 gaccacggcc ctgcgccccca gccaggcctg aggacatgag gcggccggcg 50
 gcggtgccgc tctgctgct gctgtgtttt gggctctcaga gggccaaggc 100
 agcaacagcc tgtggctcgcc ccaggatgct gaaccgaatg gtgggcgggc 150
 aggacacgca ggagggcgag tggccctggc aagtcagcat ccagcgcaac 200
 ggaagccact tctgcggggg cagcctcatc gcggagcagt gggctcctgac 250
 ggctgcgcac tgcttccgca acacctctga gacgtccctg taccaggtcc 300

tgctgggggc aaggcagcta gtgcagccgg gaccacacgc tatgtatgcc 350
 cgggtgagggc aggtggagag caacccccctg taccagggca cggcctccag 400
 cgctgacgtg gccctggtgg agctggagggc accagtgtccc ttcaccaatt 450
 acatcctccc cgtgtgcctg cctgacccct cggtgatctt tgagacgggc 500
 atgaactgct gggtcactgg ctggggcagc cccagtgtagg aagacctcct 550
 gcccgaaaccg cggatcctgc agaaactcgc tgtgcccac atcgacacac 600
 ccaagtgtcaa cctgtcttac agcaaagaca ccgagtttgg ctaccaaccc 650
 aaaaccatca agaattgacat gctgtgcgcc ggcttcgagg agggcaagaa 700
 ggatgcctgc aagggcgact cgggcggccc cctgggtgtgc ctctgtgggtc 750
 agtcgtgggt gcaggcgggg gtgatcagct ggggtgaggg ctgtgcccgc 800
 cagaaccgcc caggtgtcta catccgtgtc accgcccacc acaactggat 850
 ccatcggatc atccccaaac tgcagttcca gccagcgagg ttgggcggcc 900
 agaagtgaga ccccgggggc caggagcccc ttgagcagag ctctgcaccc 950
 agcctgcccg cccacaccat cctgctgggtc ctcccagcgc tgctgttgca 1000
 cctgtgagcc ccaccagact catttgtaaa tagcgctcct tcctcccctc 1050
 tcaaataccc ttattttatt tatgtttctc ccaataaaaa cccagcctgt 1100
 gtgccagctg aaaaaaaaaa aaaaaaaaaa 1129

<210> 222
 <211> 290
 <212> PRT
 <213> Homo Sapien

<400> 222
 Met Arg Arg Pro Ala Ala Val Pro Leu Leu Leu Leu Cys Phe
 1 5 10 15
 Gly Ser Gln Arg Ala Lys Ala Ala Thr Ala Cys Gly Arg Pro Arg
 20 25 30
 Met Leu Asn Arg Met Val Gly Gly Gln Asp Thr Gln Glu Gly Glu
 35 40 45
 Trp Pro Trp Gln Val Ser Ile Gln Arg Asn Gly Ser His Phe Cys
 50 55 60
 Gly Gly Ser Leu Ile Ala Glu Gln Trp Val Leu Thr Ala Ala His
 65 70 75
 Cys Phe Arg Asn Thr Ser Glu Thr Ser Leu Tyr Gln Val Leu Leu
 80 85 90

Gly	Ala	Arg	Gln	Leu	Val	Gln	Pro	Gly	Pro	His	Ala	Met	Tyr	Ala	
				95					100					105	
Arg	Val	Arg	Gln	Val	Glu	Ser	Asn	Pro	Leu	Tyr	Gln	Gly	Thr	Ala	
				110					115					120	
Ser	Ser	Ala	Asp	Val	Ala	Leu	Val	Glu	Leu	Glu	Ala	Pro	Val	Pro	
				125					130					135	
Phe	Thr	Asn	Tyr	Ile	Leu	Pro	Val	Cys	Leu	Pro	Asp	Pro	Ser	Val	
				140					145					150	
Ile	Phe	Glu	Thr	Gly	Met	Asn	Cys	Trp	Val	Thr	Gly	Trp	Gly	Ser	
				155					160					165	
Pro	Ser	Glu	Glu	Asp	Leu	Leu	Pro	Glu	Pro	Arg	Ile	Leu	Gln	Lys	
				170					175					180	
Leu	Ala	Val	Pro	Ile	Ile	Asp	Thr	Pro	Lys	Cys	Asn	Leu	Leu	Tyr	
				185					190					195	
Ser	Lys	Asp	Thr	Glu	Phe	Gly	Tyr	Gln	Pro	Lys	Thr	Ile	Lys	Asn	
				200					205					210	
Asp	Met	Leu	Cys	Ala	Gly	Phe	Glu	Glu	Gly	Lys	Lys	Asp	Ala	Cys	
				215					220					225	
Lys	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Val	Cys	Leu	Val	Gly	Gln	Ser	
				230					235					240	
Trp	Leu	Gln	Ala	Gly	Val	Ile	Ser	Trp	Gly	Glu	Gly	Cys	Ala	Arg	
				245					250					255	
Gln	Asn	Arg	Pro	Gly	Val	Tyr	Ile	Arg	Val	Thr	Ala	His	His	Asn	
				260					265					270	
Trp	Ile	His	Arg	Ile	Ile	Pro	Lys	Leu	Gln	Phe	Gln	Pro	Ala	Arg	
				275					280					285	
Leu	Gly	Gly	Gln	Lys											
				290											

<210> 223
 <211> 1661
 <212> DNA
 <213> Homo Sapien

<400> 223
 caagatgtgg acagctcttg tgctcatttg gattttctcc ttgtccttat 50
 ctgaaagcca tgcggcatcc aacgatccac gcaactttgt ccctaacaaa 100
 atgtggaagg gattagtcaa gaggaatgca tctgtggaaa cagttgataa 150
 taaaacgtct gaggatgtaa ccatggcagc agcttctcct gtcacattga 200
 ccaaaggac ttcggcagcc cacctcaact ctatggaagt cacaacagag 250

gacacaagca ggacagatgt gagtgaacca gcaacttcag gagttgcagc 300
 tgatggtgtg acctccattg ctcccacggc tgtggcctcc agtacgactg 350
 cggcctccat tacgactgcg gcctccagta tgactgtggc ctccagtgtc 400
 cccacgactg cagcctccag tacaactgtg gcctccattg ctcccacgac 450
 tgcagcctcc agtatgactg cggcctccag cactcccatg acacttgcac 500
 tccccgcgcc cacgtccact tccacagggc ggaccccgtc cactaccgcc 550
 actgggcatc catctctcag cacagccctc gcacaagtgc caaagagcag 600
 cgcgttgcca agaacagcaa ccctggccac attggccaca cgtgctcaga 650
 ctgtagcgac cacagcaaac acaagcagcc ccatgagcac tcgtccaagt 700
 cettccaagc acatgccag tgacaccgcg gcaagccctg tacccttat 750
 gcgtcccaa gcacaaggtc ccattagcca ggtgtcagtg gaccagcctg 800
 tggttaacac aacaaataaa tccacacca tgccctcaa cacaaccca 850
 gagcccgccc ccacccccac agtggtgacc accaccaagg cacaagccag 900
 ggagccaact gccagcccag tgccagtacc tcacaccagc ccaatccctg 950
 agatggaggc catgtcccc acgacacagc caagccccat gccatatacc 1000
 cagagggccg ctgggcccagg cacatcccag gcaccggagc aggtagagac 1050
 tgaagccaca ccaggtactg attccactgg gccaacacc aggagctcag 1100
 ggggcactaa gatgccagcc acggactcgt gccagcccag caccgaaggc 1150
 cagtacatgg tggtcaccac tgagcccctc acccaggccg tggtagacaa 1200
 aactctcctt ctggtggtgc tggtactcgg ggtgaccctt ttcatacacag 1250
 tcttggtttt gtttgccctg caggcctatg agagctacaa gaagaaggac 1300
 tacaccaggg tggactactt aatcaacggg atgtatgcgg actcagaaat 1350
 gtgagggggg cgggggcctg gcgggaggcc tggccccttc ctgctccttt 1400
 ccttttgctt ttgagaccaa accaagtgtc tccaaattct tttggtgcaa 1450
 ttgaggagat atgccagatg cttaaacaca tttaattgct gtcagattaa 1500
 ttccatgatc actaaagagt tgctgctttt ttcataattta tttttgtaaa 1550
 tgattctgtg cccaggagca gctggggggt ccacctcagg gtggggcggg 1600
 caggaccccg tctccccagg tgctgggagcc tgacctgaat taaagtactg 1650
 actgctcgcc a 1661

<210> 224
 <211> 449
 <212> PRT
 <213> Homo Sapien

<400> 224

Met	Trp	Thr	Ala	Leu	Val	Leu	Ile	Trp	Ile	Phe	Ser	Leu	Ser	Leu	1	5	10	15
Ser	Glu	Ser	His	Ala	Ala	Ser	Asn	Asp	Pro	Arg	Asn	Phe	Val	Pro	20	25	30	
Asn	Lys	Met	Trp	Lys	Gly	Leu	Val	Lys	Arg	Asn	Ala	Ser	Val	Glu	35	40	45	
Thr	Val	Asp	Asn	Lys	Thr	Ser	Glu	Asp	Val	Thr	Met	Ala	Ala	Ala	50	55	60	
Ser	Pro	Val	Thr	Leu	Thr	Lys	Gly	Thr	Ser	Ala	Ala	His	Leu	Asn	65	70	75	
Ser	Met	Glu	Val	Thr	Thr	Glu	Asp	Thr	Ser	Arg	Thr	Asp	Val	Ser	80	85	90	
Glu	Pro	Ala	Thr	Ser	Gly	Val	Ala	Ala	Asp	Gly	Val	Thr	Ser	Ile	95	100	105	
Ala	Pro	Thr	Ala	Val	Ala	Ser	Ser	Thr	Thr	Ala	Ala	Ser	Ile	Thr	110	115	120	
Thr	Ala	Ala	Ser	Ser	Met	Thr	Val	Ala	Ser	Ser	Ala	Pro	Thr	Thr	125	130	135	
Ala	Ala	Ser	Ser	Thr	Thr	Val	Ala	Ser	Ile	Ala	Pro	Thr	Thr	Ala	140	145	150	
Ala	Ser	Ser	Met	Thr	Ala	Ala	Ser	Ser	Thr	Pro	Met	Thr	Leu	Ala	155	160	165	
Leu	Pro	Ala	Pro	Thr	Ser	Thr	Ser	Thr	Gly	Arg	Thr	Pro	Ser	Thr	170	175	180	
Thr	Ala	Thr	Gly	His	Pro	Ser	Leu	Ser	Thr	Ala	Leu	Ala	Gln	Val	185	190	195	
Pro	Lys	Ser	Ser	Ala	Leu	Pro	Arg	Thr	Ala	Thr	Leu	Ala	Thr	Leu	200	205	210	
Ala	Thr	Arg	Ala	Gln	Thr	Val	Ala	Thr	Thr	Ala	Asn	Thr	Ser	Ser	215	220	225	
Pro	Met	Ser	Thr	Arg	Pro	Ser	Pro	Ser	Lys	His	Met	Pro	Ser	Asp	230	235	240	
Thr	Ala	Ala	Ser	Pro	Val	Pro	Pro	Met	Arg	Pro	Gln	Ala	Gln	Gly	245	250	255	
Pro	Ile	Ser	Gln	Val	Ser	Val	Asp	Gln	Pro	Val	Val	Asn	Thr	Thr				

	260	265	270
Asn Lys Ser Thr Pro Met Pro Ser Asn Thr Thr Pro Glu Pro Ala	275	280	285
Pro Thr Pro Thr Val Val Thr Thr Thr Lys Ala Gln Ala Arg Glu	290	295	300
Pro Thr Ala Ser Pro Val Pro Val Pro His Thr Ser Pro Ile Pro	305	310	315
Glu Met Glu Ala Met Ser Pro Thr Thr Gln Pro Ser Pro Met Pro	320	325	330
Tyr Thr Gln Arg Ala Ala Gly Pro Gly Thr Ser Gln Ala Pro Glu	335	340	345
Gln Val Glu Thr Glu Ala Thr Pro Gly Thr Asp Ser Thr Gly Pro	350	355	360
Thr Pro Arg Ser Ser Gly Gly Thr Lys Met Pro Ala Thr Asp Ser	365	370	375
Cys Gln Pro Ser Thr Gln Gly Gln Tyr Met Val Val Thr Thr Glu	380	385	390
Pro Leu Thr Gln Ala Val Val Asp Lys Thr Leu Leu Leu Val Val	395	400	405
Leu Leu Leu Gly Val Thr Leu Phe Ile Thr Val Leu Val Leu Phe	410	415	420
Ala Leu Gln Ala Tyr Glu Ser Tyr Lys Lys Lys Asp Tyr Thr Gln	425	430	435
Val Asp Tyr Leu Ile Asn Gly Met Tyr Ala Asp Ser Glu Met	440	445	

<210> 225
 <211> 1971
 <212> DNA
 <213> Homo Sapien

<400> 225
 ggaaggcgct caaggtgcgc ggcccggggc gcgctactgg gggcgccctc 50
 cgcggtgggc agcgcgccag ggatcggcct gggcagccgc ggggcgcgcg 100
 aaggctgcgc tttccctacg gccccctcg cttcctccgg cacggcggca 150
 acggagattt cctctcgggg aaactacgcg gatccttttc ggggatcctc 200
 gccccgcccc agttctccgc cccctcccct ttgctggggc gcctgggctg 250
 gcccgcgcag gggaggaggc tctggcagcc tgggcaggga ggcggcgggg 300
 ggccgcggag ccgctggcca tcgattctcc ccgccatgtg acgccgtcct 350

gttctggttc acctgtacct tctatgaagg agaattcgtc atgtcattca 1850
acactcgtga ggccaggaag ctattaaagg gatgtttcaa gctgtttcta 1900
gcacattcca aaataaatga ggagggagga aaaaaaaaaa aaaaaaaaaa 1950
aaaaaaaaaa aaaaaaaaaa a 1971

<210> 226
<211> 441
<212> PRT
<213> Homo Sapien

<400> 226
Met Leu Leu Pro Gly Arg Ala Arg Gln Pro Pro Thr Pro Gln Pro
1 5 10 15
Val Gln His Pro Gly Leu Arg Arg Gln Val Glu Pro Pro Gly Gln
20 25 30
Leu Leu Arg Leu Phe Tyr Cys Thr Val Leu Val Cys Ser Lys Glu
35 40 45
Ile Ser Ala Leu Thr Asp Phe Ser Gly Tyr Leu Thr Lys Leu Leu
50 55 60
Gln Asn His Thr Thr Tyr Ala Cys Asp Gly Asp Tyr Leu Asn Leu
65 70 75
Gln Cys Pro Arg His Ser Thr Ile Ser Val Gln Ser Ala Phe Tyr
80 85 90
Gly Gln Asp Tyr Gln Met Cys Ser Ser Gln Lys Pro Ala Ser Gln
95 100 105
Arg Glu Asp Ser Leu Thr Cys Val Ala Ala Thr Thr Phe Gln Lys
110 115 120
Val Leu Asp Glu Cys Gln Asn Gln Arg Ala Cys His Leu Leu Val
125 130 135
Asn Ser Arg Val Phe Gly Pro Asp Leu Cys Pro Gly Ser Ser Lys
140 145 150
Tyr Leu Leu Val Ser Phe Lys Cys Gln Pro Asn Glu Leu Lys Asn
155 160 165
Lys Thr Val Cys Glu Asp Gln Glu Leu Lys Leu His Cys His Glu
170 175 180
Ser Lys Phe Leu Asn Ile Tyr Ser Ala Thr Tyr Gly Arg Arg Thr
185 190 195
Gln Glu Arg Asp Ile Cys Ser Ser Lys Ala Glu Arg Leu Pro Pro
200 205 210
Phe Asp Cys Leu Ser Tyr Ser Ala Leu Gln Val Leu Ser Arg Arg
215 220 225

Cys	Tyr	Gly	Lys	Gln	Arg	Cys	Lys	Ile	Ile	Val	Asn	Asn	His	His
				230					235					240
Phe	Gly	Ser	Pro	Cys	Leu	Pro	Gly	Val	Lys	Lys	Tyr	Leu	Thr	Val
				245					250					255
Thr	Tyr	Ala	Cys	Val	Pro	Lys	Asn	Ile	Leu	Thr	Ala	Ile	Asp	Pro
				260					265					270
Ala	Ile	Ala	Asn	Leu	Lys	Pro	Ser	Leu	Lys	Gln	Lys	Asp	Gly	Glu
				275					280					285
Tyr	Gly	Ile	Asn	Phe	Asp	Pro	Ser	Gly	Ser	Lys	Val	Leu	Arg	Lys
				290					295					300
Asp	Gly	Ile	Leu	Val	Ser	Asn	Ser	Leu	Ala	Ala	Phe	Ala	Tyr	Ile
				305					310					315
Arg	Ala	His	Pro	Glu	Arg	Ala	Ala	Leu	Leu	Phe	Val	Ser	Ser	Val
				320					325					330
Cys	Ile	Gly	Leu	Ala	Leu	Thr	Leu	Cys	Ala	Leu	Val	Ile	Arg	Glu
				335					340					345
Ser	Cys	Ala	Lys	Asp	Phe	Arg	Asp	Leu	Gln	Leu	Gly	Arg	Glu	Gln
				350					355					360
Leu	Val	Pro	Gly	Ser	Asp	Lys	Val	Glu	Glu	Asp	Ser	Glu	Asp	Glu
				365					370					375
Glu	Glu	Glu	Glu	Asp	Pro	Ser	Glu	Ser	Asp	Phe	Pro	Gly	Glu	Leu
				380					385					390
Ser	Gly	Phe	Cys	Arg	Thr	Ser	Tyr	Pro	Ile	Tyr	Ser	Ser	Ile	Glu
				395					400					405
Ala	Ala	Glu	Leu	Ala	Glu	Arg	Ile	Glu	Arg	Arg	Glu	Gln	Ile	Ile
				410					415					420
Gln	Glu	Ile	Trp	Met	Asn	Ser	Gly	Leu	Asp	Thr	Ser	Leu	Pro	Arg
				425					430					435
Asn	Met	Gly	Gln	Phe	Tyr									
				440										

<210> 227
 <211> 840
 <212> DNA
 <213> Homo Sapien

<400> 227
 ggcacgaggt ggaagggctt ttacaaacag attgctggcc ccacccccca 50
 gaatttctca tcaggagtgg gcaagaccaa tcatttgcatt ttctgacaag 100
 ttcccaggag ctgcagctgc tggccctgga accacacttt gagaaccact 150
 gcttttagacc aaacacccaaa ggaagatgca gccaccctcc ttacatgtc 200

acaacgctca ggggccatga gtacctcagg ctgtccagct gagctccacc 250
 tgcagcagcc gagattcccg actcgctcca ccattggggg ctaggagtga 300
 agcgtgtcac catggtcagc tcatggccag ccaggaaagc ctctctgctg 350
 tgcgtctgtg cagttcttgt tcttccctgg aggactcttg gatcgctgt 400
 gatcttggcc aggagaccag gtgcctgggt cccttccctgg aaggggacaa 450
 gttacacacc ccagcccat tttcccacca acttctacat gccttgggag 500
 aaccttctac atgttggctg ccccttccc ctatttcagc agtgcccagt 550
 cctgcttata aacctgaggc ctgctcccca taccttccct gtgcaagtgc 600
 cagccgttat tccaggcagc ccaatgttgt tgaggccaga tggattcctg 650
 gaagcagctg gcccatggat gtgagtcac acagtattct agaaacagag 700
 aagaggtctt aacctaagtc gcatagagaa attgttctca ttgtaaacad 750
 acccctgtcc ttagctgac taggtggaag cccagcttca tgtgctaggg 800
 ggcataataa tgataataaa ggaattgtat ctaggactaa 840

<210> 228
 <211> 120
 <212> PRT
 <213> Homo Sapien

<400> 228
 Met Val Ser Ser Trp Pro Ala Arg Lys Ala Ser Leu Leu Cys Val
 1 5 10 15
 Cys Ala Val Leu Val Leu Pro Trp Arg Thr Leu Gly Ser Pro Val
 20 25 30
 Ile Leu Ala Arg Arg Pro Gly Ala Trp Val Pro Ser Trp Lys Gly
 35 40 45
 Thr Ser Tyr Thr Pro Gln Pro His Phe Pro Thr Asn Phe Tyr Met
 50 55 60
 Pro Trp Glu Asn Leu Leu His Val Gly Cys Pro Leu Pro Leu Phe
 65 70 75
 Gln Gln Cys Pro Val Leu Leu Ile Asn Leu Arg Pro Ala Pro His
 80 85 90
 Thr Phe Pro Val Gln Val Pro Ala Val Ile Pro Gly Ser Pro Met
 95 100 105
 Leu Leu Arg Pro Asp Gly Phe Leu Glu Ala Ala Gly Pro Trp Met
 110 115 120

<210> 229
 <211> 2837

<212> DNA
<213> Homo Sapien

<400> 229
gggaagggat gcaaggaagc cctccggcgc tgcgctccga ggcgggagac 50
agcgtcccgc tgaaaatgtg tgtctgacat gcaagctcag tggggcagag 100
acccgtggat tgctgtgccc tgccctccgg acctggatca tgaaggtggt 150
gggaagaagc ttcttctggg tgctgtttcc cgtccttccc tgggcggtgc 200
aggctgtgga gcacgaggag gtggcgcagc gtgtgatcaa actgcaccgc 250
gggcgagggg tggctgccat gcagagccgg cagtgggtcc gggacagctg 300
caggaagctc tcagggttc tccgccagaa gaatgcagtt ctgaacaaac 350
tgaaaactgc aattggagca gtggagaaag acgtgggcct gtcggatgaa 400
gagaaactgt ttcagggtgca cacgtttgaa attttccaga aagagctgaa 450
tgaaagtgaa aattccgttt tccaagctgt ctacggactg cagagagccc 500
tgcaggggga ttacaaagat gtcgtgaaca tgaaggagag cagccggcag 550
cgcttgagg ccctgagaga ggctgcaata aaggaagaaa cagaatatat 600
ggaacttctg gcagcagaaa aacatcaagt tgaagccctt aaaaatatgc 650
aacatcaaaa ccaaagttta tccatgcttg acgagattct tgaagatgta 700
agaaaggcag cggatcgtct ggaggaagag atagaggaac atgcttttga 750
cgacaataaa tcagtcaagg ggggtcaattt tgaggcagtt ctgaggggtg 800
aggaagaaga ggccaattct aagcaaaata taacaaaacg agaagtggag 850
gatgacttgg gtcttagcat gctgattgac tcccagaaca accagtatat 900
tttgaccaag cccagagatt caaccatccc acgtgcagat caccacttta 950
taaaggacat tgttaccata ggaatgctgt ccttgccttg tggctggcta 1000
tgtacagcca taggattgcc tacaatgttt gggttatatta tttgtggtgt 1050
acttctggga ccttcaggac taaatagtat taagtctatt gtgcaagtgg 1100
agacattagg agaatttggg gtgtttttta ctctttttct tggttgctta 1150
gaattttctc cagaaaagct aagaaaggtg tggaagattt ccttacaagg 1200
gccgtgttac atgacactgt taatgattgc atttggcttg ctgtgggggc 1250
atctcttgcg gatcaaacc acgcagagcg tcttcatttc cacgtgtctg 1300
tccttgtcaa gcacaccct cgtgtccagg ttcctcatgg gcagtgtctg 1350

ggggtgacaaa gaaggcgaca ttgactacag caccgtgctc ctcggcatgc 1400
 tgggtgacgca ggacgtgcag ctcggtctct tcatggccgt catgccgact 1450
 ctcatacagg cgggcgccag tgcattctct agcattgtcg tggaagttct 1500
 ccgaatcctg gttttgattg gtcagattct tttttcacta gcggcggttt 1550
 ttcttttatg tcttgttata aagaagtatc tcattggacc ctattatcgg 1600
 aagctgcaca tggaaagcaa ggggaacaaa gaaatcctga tcttggaat 1650
 atctgccttt atcttcttaa tgttaacggt cacggagctg ctggacgtct 1700
 ccatggagct gggctgttcc ctggctggag cgctcgtctc ctctcagggc 1750
 cccgtggtca ccgaggagat cgccacctcc atcgaacca tccgcgactt 1800
 cctggccatc gttttcttcg cctccatagg gctccacgtg ttccccacgt 1850
 ttgtggcgta cgagctcacg gtgctggtgt tcctcacctt gtcagtgggtg 1900
 gtgatgaagt ttctcctggc ggcgtggtc ctgtctctca ttctgccgag 1950
 gagcagccag tacatcaagt ggategtctc tgcggggctt gccaggtca 2000
 gcgagtttcc ctttgctctg gggagccggg cgccaagagc gggcgctatc 2050
 tctcgggagg tgtacctct tatactgagt gtgaccacgc tcagcctctt 2100
 gctcgccccg gtgctgtgga gagctgcaat cacgaggtgt gtgccagac 2150
 cggagagacg gtccagcctc tgatggctcg gagatgatgg accgtggaag 2200
 ggaagcgtct gtggggagtg agcgcttaga tggccagcag ctgctccttc 2250
 tgggaagctc gcaccttggc aacagaacag ccctctagca gagcgtcagt 2300
 gcagtcgtgt tatcccggct ttacagaat attcttgtcc tatttttagaa 2350
 ttttccggag tagtttattt gcagtctgtt gattatgtgc agtagaccgc 2400
 ggacactgcg ttttaccgat caccttgaat gtgggtgcctg gatgtgcctt 2450
 tttttttttt ccctgaaatt attattaatt ttctattgtg agttcatcag 2500
 ttcatagttt ttttagtaaa gaagcaaaat taaaaggctt ttaaaaatgt 2550
 acaacttcag aattataatc tgtagtcaa atatttgta ttaaacattt 2600
 ctgtaatatg aagttgtaat cctggccgtg agcttggaag cttacttttg 2650
 attcttaaag cctatgtttt ctaaaatgag acaaatacgg atgtctattt 2700
 gccttttatt gtaactttta aatgaaataa tttcatgtca atttctatta 2750
 gatatatcac ttaaaatatt tggttttaaa tcacaagaat atgtattctt 2800

taataaagat aatttatgat catggtaaaa aaaaaaa 2837

<210> 230

<211> 677

<212> PRT

<213> Homo Sapien

<400> 230

Met	Lys	Val	Leu	Gly	Arg	Ser	Phe	Phe	Trp	Val	Leu	Phe	Pro	Val
1				5					10					15

Leu	Pro	Trp	Ala	Val	Gln	Ala	Val	Glu	His	Glu	Glu	Val	Ala	Gln
				20					25					30

Arg	Val	Ile	Lys	Leu	His	Arg	Gly	Arg	Gly	Val	Ala	Ala	Met	Gln
				35					40					45

Ser	Arg	Gln	Trp	Val	Arg	Asp	Ser	Cys	Arg	Lys	Leu	Ser	Gly	Leu
				50					55					60

Leu	Arg	Gln	Lys	Asn	Ala	Val	Leu	Asn	Lys	Leu	Lys	Thr	Ala	Ile
				65					70					75

Gly	Ala	Val	Glu	Lys	Asp	Val	Gly	Leu	Ser	Asp	Glu	Glu	Lys	Leu
				80					85					90

Phe	Gln	Val	His	Thr	Phe	Glu	Ile	Phe	Gln	Lys	Glu	Leu	Asn	Glu
				95					100					105

Ser	Glu	Asn	Ser	Val	Phe	Gln	Ala	Val	Tyr	Gly	Leu	Gln	Arg	Ala
				110					115					120

Leu	Gln	Gly	Asp	Tyr	Lys	Asp	Val	Val	Asn	Met	Lys	Glu	Ser	Ser
				125					130					135

Arg	Gln	Arg	Leu	Glu	Ala	Leu	Arg	Glu	Ala	Ala	Ile	Lys	Glu	Glu
				140					145					150

Thr	Glu	Tyr	Met	Glu	Leu	Leu	Ala	Ala	Glu	Lys	His	Gln	Val	Glu
				155					160					165

Ala	Leu	Lys	Asn	Met	Gln	His	Gln	Asn	Gln	Ser	Leu	Ser	Met	Leu
				170					175					180

Asp	Glu	Ile	Leu	Glu	Asp	Val	Arg	Lys	Ala	Ala	Asp	Arg	Leu	Glu
				185					190					195

Glu	Glu	Ile	Glu	Glu	His	Ala	Phe	Asp	Asp	Asn	Lys	Ser	Val	Lys
				200					205					210

Gly	Val	Asn	Phe	Glu	Ala	Val	Leu	Arg	Val	Glu	Glu	Glu	Glu	Ala
				215					220					225

Asn	Ser	Lys	Gln	Asn	Ile	Thr	Lys	Arg	Glu	Val	Glu	Asp	Asp	Leu
				230					235					240

Gly	Leu	Ser	Met	Leu	Ile	Asp	Ser	Gln	Asn	Asn	Gln	Tyr	Ile	Leu
				245					250					255

Thr	Lys	Pro	Arg	Asp	Ser	Thr	Ile	Pro	Arg	Ala	Asp	His	His	Phe
				260					265					270
Ile	Lys	Asp	Ile	Val	Thr	Ile	Gly	Met	Leu	Ser	Leu	Pro	Cys	Gly
				275					280					285
Trp	Leu	Cys	Thr	Ala	Ile	Gly	Leu	Pro	Thr	Met	Phe	Gly	Tyr	Ile
				290					295					300
Ile	Cys	Gly	Val	Leu	Leu	Gly	Pro	Ser	Gly	Leu	Asn	Ser	Ile	Lys
				305					310					315
Ser	Ile	Val	Gln	Val	Glu	Thr	Leu	Gly	Glu	Phe	Gly	Val	Phe	Phe
				320					325					330
Thr	Leu	Phe	Leu	Val	Gly	Leu	Glu	Phe	Ser	Pro	Glu	Lys	Leu	Arg
				335					340					345
Lys	Val	Trp	Lys	Ile	Ser	Leu	Gln	Gly	Pro	Cys	Tyr	Met	Thr	Leu
				350					355					360
Leu	Met	Ile	Ala	Phe	Gly	Leu	Leu	Trp	Gly	His	Leu	Leu	Arg	Ile
				365					370					375
Lys	Pro	Thr	Gln	Ser	Val	Phe	Ile	Ser	Thr	Cys	Leu	Ser	Leu	Ser
				380					385					390
Ser	Thr	Pro	Leu	Val	Ser	Arg	Phe	Leu	Met	Gly	Ser	Ala	Arg	Gly
				395					400					405
Asp	Lys	Glu	Gly	Asp	Ile	Asp	Tyr	Ser	Thr	Val	Leu	Leu	Gly	Met
				410					415					420
Leu	Val	Thr	Gln	Asp	Val	Gln	Leu	Gly	Leu	Phe	Met	Ala	Val	Met
				425					430					435
Pro	Thr	Leu	Ile	Gln	Ala	Gly	Ala	Ser	Ala	Ser	Ser	Ser	Ile	Val
				440					445					450
Val	Glu	Val	Leu	Arg	Ile	Leu	Val	Leu	Ile	Gly	Gln	Ile	Leu	Phe
				455					460					465
Ser	Leu	Ala	Ala	Val	Phe	Leu	Leu	Cys	Leu	Val	Ile	Lys	Lys	Tyr
				470					475					480
Leu	Ile	Gly	Pro	Tyr	Tyr	Arg	Lys	Leu	His	Met	Glu	Ser	Lys	Gly
				485					490					495
Asn	Lys	Glu	Ile	Leu	Ile	Leu	Gly	Ile	Ser	Ala	Phe	Ile	Phe	Leu
				500					505					510
Met	Leu	Thr	Val	Thr	Glu	Leu	Leu	Asp	Val	Ser	Met	Glu	Leu	Gly
				515					520					525
Cys	Phe	Leu	Ala	Gly	Ala	Leu	Val	Ser	Ser	Gln	Gly	Pro	Val	Val
				530					535					540
Thr	Glu	Glu	Ile	Ala	Thr	Ser	Ile	Glu	Pro	Ile	Arg	Asp	Phe	Leu

	545		550		555									
Ala	Ile	Val	Phe	Phe	Ala	Ser	Ile	Gly	Leu	His	Val	Phe	Pro	Thr
	560								565					570
Phe	Val	Ala	Tyr	Glu	Leu	Thr	Val	Leu	Val	Phe	Leu	Thr	Leu	Ser
	575								580					585
Val	Val	Val	Met	Lys	Phe	Leu	Leu	Ala	Ala	Leu	Val	Leu	Ser	Leu
	590								595					600
Ile	Leu	Pro	Arg	Ser	Ser	Gln	Tyr	Ile	Lys	Trp	Ile	Val	Ser	Ala
	605								610					615
Gly	Leu	Ala	Gln	Val	Ser	Glu	Phe	Ser	Phe	Val	Leu	Gly	Ser	Arg
	620								625					630
Ala	Arg	Arg	Ala	Gly	Val	Ile	Ser	Arg	Glu	Val	Tyr	Leu	Leu	Ile
	635								640					645
Leu	Ser	Val	Thr	Thr	Leu	Ser	Leu	Leu	Leu	Ala	Pro	Val	Leu	Trp
	650								655					660
Arg	Ala	Ala	Ile	Thr	Arg	Cys	Val	Pro	Arg	Pro	Glu	Arg	Arg	Ser
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Ser	Leu													

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 <211> 1058
 <212> DNA
 <213> Homo Sapien

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 tttgagaaga aggcaaaaag atgctgggga gcagagctgt aatgctgctg 200
 ttgctgctgc cctggacagc tcagggcaga gctgtgcctg ggggcagcag 250
 ccctgcctgg actcagtgcc agcagctttc acagaagctc tgcacactgg 300
 cctggagtgc acatccacta gtgggacaca tggatctaag agaagaggga 350
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 ggggagcctt ctctgctccc tgatagccct gtgggcccagc ttcattgcctc 550
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ccgggtcttt gcccatggag cagcaaccct gagtccttaa aggcagcagc 750
tcaaggatgg cactcagatc tccatggccc agcaaggcca agataaatct 800
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<210> 232
<211> 189
<212> PRT
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Thr Gln Cys Gln Gln Leu Ser Gln Lys Leu Cys Thr Leu Ala Trp
                35                      40                      45

Ser Ala His Pro Leu Val Gly His Met Asp Leu Arg Glu Glu Gly
                50                      55                      60

Asp Glu Glu Thr Thr Asn Asp Val Pro His Ile Gln Cys Gly Asp
                65                      70                      75

Gly Cys Asp Pro Gln Gly Leu Arg Asp Asn Ser Gln Phe Cys Leu
                80                      85                      90

Gln Arg Ile His Gln Gly Leu Ile Phe Tyr Glu Lys Leu Leu Gly
                95                      100                      105

Ser Asp Ile Phe Thr Gly Glu Pro Ser Leu Leu Pro Asp Ser Pro
                110                      115                      120

Val Gly Gln Leu His Ala Ser Leu Leu Gly Leu Ser Gln Leu Leu
                125                      130                      135

Gln Pro Glu Gly His His Trp Glu Thr Gln Gln Ile Pro Ser Leu
                140                      145                      150

Ser Pro Ser Gln Pro Trp Gln Arg Leu Leu Leu Arg Phe Lys Ile
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Leu Arg Ser Leu Gln Ala Phe Val Ala Val Ala Ala Arg Val Phe
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Ala His Gly Ala Ala Thr Leu Ser Pro
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<212> DNA
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cctcctctgg gctctgctgt tcatgcagtc cttgtggcct caactgactg 200
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cctacaagaa gaccatctat aaagaatata aggatgactc atacacagat 400
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 <212> PRT
 <213> Homo Sapien

<400> 234
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 20 25 30
 Tyr Tyr Leu Gly Ile Arg Asp Val Gln Trp Asn Tyr Ala Pro Lys
 35 40 45
 Gly Arg Asn Val Ile Thr Asn Gln Pro Leu Asp Ser Asp Ile Val
 50 55 60
 Ala Ser Ser Phe Leu Lys Ser Asp Lys Asn Arg Ile Gly Gly Thr
 65 70 75
 Tyr Lys Lys Thr Ile Tyr Lys Glu Tyr Lys Asp Asp Ser Tyr Thr
 80 85 90
 Asp Glu Val Ala Gln Pro Ala Trp Leu Gly Phe Leu Gly Pro Val
 95 100 105
 Leu Gln Ala Glu Val Gly Asp Val Ile Leu Ile His Leu Lys Asn
 110 115 120
 Phe Ala Thr Arg Pro Tyr Thr Ile His Pro His Gly Val Phe Tyr
 125 130 135
 Glu Lys Asp Ser Glu Gly Ser Leu Tyr Pro Asp Gly Ser Ser Gly
 140 145 150
 Pro Leu Lys Ala Asp Asp Ser Val Pro Pro Gly Gly Ser His Ile
 155 160 165
 Tyr Asn Trp Thr Ile Pro Glu Gly His Ala Pro Thr Asp Ala Asp
 170 175 180
 Pro Ala Cys Leu Thr Trp Ile Tyr His Ser His Val Asp Ala Pro
 185 190 195
 Arg Asp Ile Ala Thr Gly Leu Ile Gly Pro Leu Ile Thr Cys Lys

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Arg	Gly	Ala	Leu	Asp	Gly	Asn	Ser	Pro	Pro	Gln	Arg	Gln	Asp	Val
				215					220					225
Asp	His	Asp	Phe	Phe	Leu	Leu	Phe	Ser	Val	Val	Asp	Glu	Asn	Leu
				230					235					240
Ser	Trp	His	Leu	Asn	Glu	Asn	Ile	Ala	Thr	Tyr	Cys	Ser	Asp	Pro
				245					250					255
Ala	Ser	Val	Asp	Lys	Glu	Asp	Glu	Thr	Phe	Gln	Glu	Ser	Asn	Arg
				260					265					270
Met	His	Ala	Ile	Asn	Gly	Phe	Val	Phe	Gly	Asn	Leu	Pro	Glu	Leu
				275					280					285
Asn	Met	Cys	Ala	Gln	Lys	Arg	Val	Ala	Trp	His	Leu	Phe	Gly	Met
				290					295					300
Gly	Asn	Glu	Ile	Asp	Val	His	Thr	Ala	Phe	Phe	His	Gly	Gln	Met
				305					310					315
Leu	Thr	Thr	Arg	Gly	His	His	Thr	Asp	Val	Ala	Asn	Ile	Phe	Pro
				320					325					330
Ala	Thr	Phe	Val	Thr	Ala	Glu	Met	Val	Pro	Trp	Glu	Pro	Gly	Thr
				335					340					345
Trp	Leu	Ile	Ser	Cys	Gln	Val	Asn	Ser	His	Phe	Arg	Asp	Gly	Met
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Gln	Ala	Leu	Tyr	Lys	Val	Lys	Ser	Cys	Ser	Met	Ala	Pro	Pro	Val
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Asp	Leu	Leu	Thr	Gly	Lys	Val	Arg	Gln	Tyr	Phe	Ile	Glu	Ala	His
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Glu	Ile	Gln	Trp	Asp	Tyr	Gly	Pro	Met	Gly	His	Asp	Gly	Ser	Thr
				395					400					405
Gly	Lys	Asn	Leu	Arg	Glu	Pro	Gly	Ser	Ile	Ser	Asp	Lys	Phe	Phe
				410					415					420
Gln	Lys	Ser	Ser	Ser	Arg	Ile	Gly	Gly	Thr	Tyr	Trp	Lys	Val	Arg
				425					430					435
Tyr	Glu	Ala	Phe	Gln	Asp	Glu	Thr	Phe	Gln	Glu	Lys	Met	His	Leu
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Glu	Glu	Asp	Arg	His	Leu	Gly	Ile	Leu	Gly	Pro	Val	Ile	Arg	Ala
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Glu	Val	Gly	Asp	Thr	Ile	Gln	Val	Val	Phe	Tyr	Asn	Arg	Ala	Ser
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Gln	Pro	Phe	Ser	Met	Gln	Pro	His	Gly	Val	Phe	Tyr	Glu	Lys	Asp
				485					490					495

Tyr	Glu	Gly	Thr	Val	Tyr	Asn	Asp	Gly	Ser	Ser	Tyr	Pro	Gly	Leu
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Val	Ala	Lys	Pro	Phe	Glu	Lys	Val	Thr	Tyr	Arg	Trp	Thr	Val	Pro
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Pro	His	Ala	Gly	Pro	Thr	Ala	Gln	Asp	Pro	Ala	Cys	Leu	Thr	Trp
				530					535					540
Met	Tyr	Phe	Ser	Ala	Ala	Asp	Pro	Ile	Arg	Asp	Thr	Asn	Ser	Gly
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Leu	Val	Gly	Pro	Leu	Leu	Val	Cys	Arg	Ala	Gly	Ala	Leu	Gly	Ala
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Asp	Gly	Lys	Gln	Lys	Gly	Val	Asp	Lys	Glu	Phe	Phe	Leu	Leu	Phe
				575					580					585
Thr	Val	Leu	Asp	Glu	Asn	Lys	Ser	Trp	Tyr	Ser	Asn	Ala	Asn	Gln
				590					595					600
Ala	Ala	Ala	Met	Leu	Asp	Phe	Arg	Leu	Leu	Ser	Glu	Asp	Ile	Glu
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Gly	Phe	Gln	Asp	Ser	Asn	Arg	Met	His	Ala	Ile	Asn	Gly	Phe	Leu
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Phe	Ser	Asn	Leu	Pro	Arg	Leu	Asp	Met	Cys	Lys	Gly	Asp	Thr	Val
				635					640					645
Ala	Trp	His	Leu	Leu	Gly	Leu	Gly	Thr	Glu	Thr	Asp	Val	His	Gly
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Val	Met	Phe	Gln	Gly	Asn	Thr	Val	Gln	Leu	Gln	Gly	Met	Arg	Lys
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Gly	Ala	Ala	Met	Leu	Phe	Pro	His	Thr	Phe	Val	Met	Ala	Ile	Met
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Gln	Pro	Asp	Asn	Leu	Gly	Thr	Phe	Glu	Ile	Tyr	Cys	Gln	Ala	Gly
				695					700					705
Ser	His	Arg	Glu	Ala	Gly	Met	Arg	Ala	Ile	Tyr	Asn	Val	Ser	Gln
				710					715					720
Cys	Pro	Gly	His	Gln	Ala	Thr	Pro	Arg	Gln	Arg	Tyr	Gln	Ala	Ala
				725					730					735
Arg	Ile	Tyr	Tyr	Ile	Met	Ala	Glu	Glu	Val	Glu	Trp	Asp	Tyr	Cys
				740					745					750
Pro	Asp	Arg	Ser	Trp	Glu	Arg	Glu	Trp	His	Asn	Gln	Ser	Glu	Lys
				755					760					765
Asp	Ser	Tyr	Gly	Tyr	Ile	Phe	Leu	Ser	Asn	Lys	Asp	Gly	Leu	Leu
				770					775					780
Gly	Ser	Arg	Tyr	Lys	Lys	Ala	Val	Phe	Arg	Glu	Tyr	Thr	Asp	Gly

				785					790					795
Thr	Phe	Arg	Ile	Pro	Arg	Pro	Arg	Thr	Gly	Pro	Glu	Glu	His	Leu
				800					805					810
Gly	Ile	Leu	Gly	Pro	Leu	Ile	Lys	Gly	Glu	Val	Gly	Asp	Ile	Leu
				815					820					825
Thr	Val	Val	Phe	Lys	Asn	Asn	Ala	Ser	Arg	Pro	Tyr	Ser	Val	His
				830					835					840
Ala	His	Gly	Val	Leu	Glu	Ser	Thr	Thr	Val	Trp	Pro	Leu	Ala	Ala
				845					850					855
Glu	Pro	Gly	Glu	Val	Val	Thr	Tyr	Gln	Trp	Asn	Ile	Pro	Glu	Arg
				860					865					870
Ser	Gly	Pro	Gly	Pro	Asn	Asp	Ser	Ala	Cys	Val	Ser	Trp	Ile	Tyr
				875					880					885
Tyr	Ser	Ala	Val	Asp	Pro	Ile	Lys	Asp	Met	Tyr	Ser	Gly	Leu	Val
				890					895					900
Gly	Pro	Leu	Ala	Ile	Cys	Gln	Lys	Gly	Ile	Leu	Glu	Pro	His	Gly
				905					910					915
Gly	Arg	Ser	Asp	Met	Asp	Arg	Glu	Phe	Ala	Leu	Leu	Phe	Leu	Ile
				920					925					930
Phe	Asp	Glu	Asn	Lys	Ser	Trp	Tyr	Leu	Glu	Glu	Asn	Val	Ala	Thr
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His	Gly	Ser	Gln	Asp	Pro	Gly	Ser	Ile	Asn	Leu	Gln	Asp	Glu	Thr
				950					955					960
Phe	Leu	Glu	Ser	Asn	Lys	Met	His	Ala	Ile	Asn	Gly	Lys	Leu	Tyr
				965					970					975
Ala	Asn	Leu	Arg	Gly	Leu	Thr	Met	Tyr	Gln	Gly	Glu	Arg	Val	Ala
				980					985					990
Trp	Tyr	Met	Leu	Ala	Met	Gly	Gln	Asp	Val	Asp	Leu	His	Thr	Ile
				995					1000					1005
His	Phe	His	Ala	Glu	Ser	Phe	Leu	Tyr	Arg	Asn	Gly	Glu	Asn	Tyr
				1010					1015					1020
Arg	Ala	Asp	Val	Val	Asp	Leu	Phe	Pro	Gly	Thr	Phe	Glu	Val	Val
				1025					1030					1035
Glu	Met	Val	Ala	Ser	Asn	Pro	Gly	Thr	Trp	Leu	Met	His	Cys	His
				1040					1045					1050
Val	Thr	Asp	His	Val	His	Ala	Gly	Met	Glu	Thr	Leu	Phe	Thr	Val
				1055					1060					1065
Phe	Ser	Arg	Thr	Glu	His	Leu	Ser	Pro	Leu	Thr	Val	Ile	Thr	Lys
				1070					1075					1080

Glu Thr Glu Lys Val Pro Pro Arg Asp Ile Glu Glu Gly Asn Val		
1085	1090	1095
Lys Met Leu Gly Met Gln Ile Pro Ile Lys Asn Val Glu Met Leu		
1100	1105	1110
Ala Ser Val Leu Val Ala Ile Ser Val Thr Leu Leu Leu Val Val		
1115	1120	1125
Leu Ala Leu Gly Gly Val Val Trp Tyr Gln His Arg Gln Arg Lys		
1130	1135	1140
Leu Arg Arg Asn Arg Arg Ser Ile Leu Asp Asp Ser Phe Lys Leu		
1145	1150	1155
Leu Ser Phe Lys Gln		
1160		

<210> 235
 <211> 3442
 <212> DNA
 <213> Homo Sapien

<400> 235
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 gatggcaaca tacttagaat acacagcttt ctgggccaga aattgatctt 200
 ctgacttttg agccttatct gattactgct tgggtcatct ttattttggt 250
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 tgactagaca ggaattctgg caactgctcc agcagaacta tggcactgag 350
 ctaggtttaa atgctgagga gatggaaaac ttgtcactgt cgattgagga 400
 tgtgcagcca agaagtccag gaagaagcag cttggatgac tctggggaga 450
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 cgggttttcag aaacagagtc attcgatgga aattcatcaa aaggaggatt 550
 aggcaaagag gagtcccaaa atgagaaaca gacaaaaaag agtctcttac 600
 caactttgga aaagaagtta actagagtgc catcaaagtc actggacttg 650
 aataaaaatg aatatctttc tctggacaaa agcagcactt cagattctgt 700
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 cttcaaccga acagcagaaa cagttcctaa actttcctct cagcattcct 1350
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 tgttacgtaa attgaatatt aataaaattg aaaatttcaa aa 3442

<210> 236
 <211> 457
 <212> PRT
 <213> Homo Sapien

<400> 236
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 Pro Gly Arg Ser Ser Leu Asp Asp Ser Gly Glu Arg Asp Glu Lys
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Leu	Ser	Lys	Ser	Ile	Ser	Phe	Thr	Ser	Glu	Ser	Ile	Ser	Arg	Val	
				35					40					45	
Ser	Glu	Thr	Glu	Ser	Phe	Asp	Gly	Asn	Ser	Ser	Lys	Gly	Gly	Leu	
				50					55					60	
Gly	Lys	Glu	Glu	Ser	Gln	Asn	Glu	Lys	Gln	Thr	Lys	Lys	Ser	Leu	
				65					70					75	
Leu	Pro	Thr	Leu	Glu	Lys	Lys	Leu	Thr	Arg	Val	Pro	Ser	Lys	Ser	
				80					85					90	
Leu	Asp	Leu	Asn	Lys	Asn	Glu	Tyr	Leu	Ser	Leu	Asp	Lys	Ser	Ser	
				95					100					105	
Thr	Ser	Asp	Ser	Val	Asp	Glu	Glu	Asn	Val	Pro	Glu	Lys	Asp	Leu	
				110					115					120	
His	Gly	Arg	Leu	Phe	Ile	Asn	Arg	Ile	Phe	His	Ile	Ser	Ala	Asp	
				125					130					135	
Arg	Met	Phe	Glu	Leu	Leu	Phe	Thr	Ser	Ser	Arg	Phe	Met	Gln	Lys	
				140					145					150	
Phe	Ala	Ser	Ser	Arg	Asn	Ile	Ile	Asp	Val	Val	Ser	Thr	Pro	Trp	
				155					160					165	
Thr	Ala	Glu	Leu	Gly	Gly	Asp	Gln	Leu	Arg	Thr	Met	Thr	Tyr	Thr	
				170					175					180	
Ile	Val	Leu	Asn	Ser	Pro	Leu	Thr	Gly	Lys	Cys	Thr	Ala	Ala	Thr	
				185					190					195	
Glu	Lys	Gln	Thr	Leu	Tyr	Lys	Glu	Ser	Arg	Glu	Ala	Arg	Phe	Tyr	
				200					205					210	
Leu	Val	Asp	Ser	Glu	Val	Leu	Thr	His	Asp	Val	Pro	Tyr	His	Asp	
				215					220					225	
Tyr	Phe	Tyr	Thr	Val	Asn	Arg	Tyr	Cys	Ile	Ile	Arg	Ser	Ser	Lys	
				230					235					240	
Gln	Lys	Cys	Arg	Leu	Arg	Val	Ser	Thr	Asp	Leu	Lys	Tyr	Arg	Lys	
				245					250					255	
Gln	Pro	Trp	Gly	Leu	Val	Lys	Ser	Leu	Ile	Glu	Lys	Asn	Ser	Trp	
				260					265					270	
Ser	Ser	Leu	Glu	Asp	Tyr	Phe	Lys	Gln	Leu	Glu	Ser	Asp	Leu	Leu	
				275					280					285	
Ile	Glu	Glu	Ser	Val	Leu	Asn	Gln	Ala	Ile	Glu	Asp	Pro	Gly	Lys	
				290					295					300	
Leu	Thr	Gly	Leu	Arg	Arg	Arg	Arg	Arg	Thr	Phe	Asn	Arg	Thr	Ala	
				305					310					315	
Glu	Thr	Val	Pro	Lys	Leu	Ser	Ser	Gln	His	Ser	Ser	Gly	Asp	Val	

	320		325		330
Gly Leu Gly Ala Lys Gly Asp Ile Thr	Gly Lys Lys Lys Glu Met				
335	340			345	
Glu Asn Tyr Asn Val Thr Leu Ile Val	Val Met Ser Ile Phe Val				
350	355			360	
Leu Leu Leu Val Leu Leu Asn Val Thr	Leu Phe Leu Lys Leu Ser				
365	370			375	
Lys Ile Glu His Ala Ala Gln Ser Phe	Tyr Arg Leu Arg Leu Gln				
380	385			390	
Glu Glu Lys Ser Leu Asn Leu Ala Ser	Asp Met Val Ser Arg Ala				
395	400			405	
Glu Thr Ile Gln Lys Asn Lys Asp Gln	Ala His Arg Leu Lys Gly				
410	415			420	
Val Leu Arg Asp Ser Ile Val Met Leu	Glu Gln Leu Lys Ser Ser				
425	430			435	
Leu Ile Met Leu Gln Lys Thr Phe Asp	Leu Leu Asn Lys Asn Lys				
440	445			450	
Thr Gly Met Ala Val Glu Ser					
455					

<210> 237
 <211> 762
 <212> DNA
 <213> Homo Sapien

<400> 237
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 cctgacttca atgctgaaaa gttctcaggc ctctggtacg tggctccat 150
 ggcattctgac tgcagggtct tcctgggcaa gaaggaccac ctgtccatgt 200
 ccaccagggc catcaggccc acagaggagg gcggcctcca cgtccacatg 250
 gagttcccgg gggcggacgg ctgtaaccag gtggatgccg agtacctgaa 300
 ggtgggctcc gagggacact tcagagtccc ggccttgggc tacctggacg 350
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 aaggagctgg agggggccct cagcaccatg gtgcagctct acagccggac 450
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 tgcaaccctg agagcaagga ggcgccctga cacctccgga gccccacccc 600

cgcccttccc aggtggagcc aaagcagcag gcgcctttgc ccttggagtc 650
aagacccaca gccctcgagg accacctgga gtctctccat cctccacccc 700
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gctgcagcct ca 762

<210> 238
<211> 184
<212> PRT
<213> Homo Sapien

<400> 238
Met Met Ser Phe Leu Leu Gly Ala Ile Leu Thr Leu Leu Trp Ala
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Pro Thr Ala Gln Ala Glu Val Leu Leu Gln Pro Asp Phe Asn Ala
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Glu Lys Phe Ser Gly Leu Trp Tyr Val Val Ser Met Ala Ser Asp
35 40 45
Cys Arg Val Phe Leu Gly Lys Lys Asp His Leu Ser Met Ser Thr
50 55 60
Arg Ala Ile Arg Pro Thr Glu Glu Gly Gly Leu His Val His Met
65 70 75
Glu Phe Pro Gly Ala Asp Gly Cys Asn Gln Val Asp Ala Glu Tyr
80 85 90
Leu Lys Val Gly Ser Glu Gly His Phe Arg Val Pro Ala Leu Gly
95 100 105
Tyr Leu Asp Val Arg Ile Val Asp Thr Asp Tyr Ser Ser Phe Ala
110 115 120
Val Leu Tyr Ile Tyr Lys Glu Leu Glu Gly Ala Leu Ser Thr Met
125 130 135
Val Gln Leu Tyr Ser Arg Thr Gln Asp Val Ser Pro Gln Ala Leu
140 145 150
Lys Ser Phe Gln Asp Phe Tyr Pro Thr Leu Gly Leu Pro Lys Asp
155 160 165
Met Met Val Met Leu Pro Gln Ser Asp Ala Cys Asn Pro Glu Ser
170 175 180
Lys Glu Ala Pro

<210> 239
<211> 1656
<212> DNA
<213> Homo Sapien

<400> 239

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aatgtcatct tttgctataa cctttgccaa gttagagaaa agatggattt 1600
aatgagataa atgaaaagat atttaaccta aaaaaaaaaa aaaaaaaaaa 1650
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<210> 240
<211> 189
<212> PRT
<213> Homo Sapien

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<400> 240
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Met Ala Ala Val Val Arg Cys Gln Glu Gln Ala Gln Thr Thr Asp
          20          25          30

Trp Arg Ala Thr Leu Lys Thr Ile Arg Asn Gly Val His Lys Ile
          35          40          45

Asp Thr Tyr Leu Asn Ala Ala Leu Asp Leu Leu Gly Gly Glu Asp
          50          55          60

Gly Leu Cys Gln Tyr Lys Cys Ser Asp Gly Ser Lys Pro Phe Pro
          65          70          75

Arg Tyr Gly Tyr Lys Pro Ser Pro Pro Asn Gly Cys Gly Ser Pro
          80          85          90

Leu Phe Gly Val His Leu Asn Ile Gly Ile Pro Ser Leu Thr Lys
          95          100          105

Cys Cys Asn Gln His Asp Arg Cys Tyr Glu Thr Cys Gly Lys Ser
          110          115          120

Lys Asn Asp Cys Asp Glu Glu Phe Gln Tyr Cys Leu Ser Lys Ile
          125          130          135

Cys Arg Asp Val Gln Lys Thr Leu Gly Leu Thr Gln His Val Gln
          140          145          150

Ala Cys Glu Thr Thr Val Glu Leu Leu Phe Asp Ser Val Ile His
          155          160          165

Leu Gly Cys Lys Pro Tyr Leu Asp Ser Gln Arg Ala Ala Cys Arg
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Cys His Tyr Glu Glu Lys Thr Asp Leu
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<210> 241
<211> 1319
<212> DNA

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<213> Homo Sapien

<400> 241

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acggaagcgg cctagtcctc cggctccgac agctgggtgt ccaggccatg 200
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taaagcactg acttggttaa 1319

<210> 242

<211> 284
 <212> PRT
 <213> Homo Sapien

<400> 242

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Gln	Leu	Pro	Leu	Val	Leu	Thr	Ala	Leu	Trp	Ala	Ala	Ala	Val	Gly	20	25	30	
Leu	Glu	Leu	Ala	Tyr	Val	Leu	Val	Leu	Gly	Pro	Gly	Pro	Pro	Pro	35	40	45	
Leu	Gly	Pro	Leu	Ala	Arg	Ala	Leu	Gln	Leu	Ala	Leu	Ala	Ala	Phe	50	55	60	
Gln	Leu	Leu	Asn	Leu	Leu	Gly	Asn	Val	Gly	Leu	Phe	Leu	Arg	Ser	65	70	75	
Asp	Pro	Ser	Ile	Arg	Gly	Val	Met	Leu	Ala	Gly	Arg	Gly	Leu	Gly	80	85	90	
Gln	Gly	Trp	Ala	Tyr	Cys	Tyr	Gln	Cys	Gln	Ser	Gln	Val	Pro	Pro	95	100	105	
Arg	Ser	Gly	His	Cys	Ser	Ala	Cys	Arg	Val	Cys	Ile	Leu	Arg	Arg	110	115	120	
Asp	His	His	Cys	Arg	Leu	Leu	Gly	Arg	Cys	Val	Gly	Phe	Gly	Asn	125	130	135	
Tyr	Arg	Pro	Phe	Leu	Cys	Leu	Leu	Leu	His	Ala	Ala	Gly	Val	Leu	140	145	150	
Leu	His	Val	Ser	Val	Leu	Leu	Gly	Pro	Ala	Leu	Ser	Ala	Leu	Leu	155	160	165	
Arg	Ala	His	Thr	Pro	Leu	His	Met	Ala	Ala	Leu	Leu	Leu	Leu	Pro	170	175	180	
Trp	Leu	Met	Leu	Leu	Thr	Gly	Arg	Val	Ser	Leu	Ala	Gln	Phe	Ala	185	190	195	
Leu	Ala	Phe	Val	Thr	Asp	Thr	Cys	Val	Ala	Gly	Ala	Leu	Leu	Cys	200	205	210	
Gly	Ala	Gly	Leu	Leu	Phe	His	Gly	Met	Leu	Leu	Leu	Arg	Gly	Gln	215	220	225	
Thr	Thr	Trp	Glu	Trp	Ala	Arg	Gly	Gln	His	Ser	Tyr	Asp	Leu	Gly	230	235	240	
Pro	Cys	His	Asn	Leu	Gln	Ala	Ala	Leu	Gly	Pro	Arg	Trp	Ala	Leu	245	250	255	
Val	Trp	Leu	Trp	Pro	Phe	Leu	Ala	Ser	Pro	Leu	Pro	Gly	Asp	Gly	260	265	270	

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<211> 1837

<212> DNA

<213> Homo Sapien

<400> 243

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 <211> 246
 <212> PRT
 <213> Homo Sapien

<400> 244
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 35 40 45
 Lys Trp Leu Leu Met Arg Asn Met Val Cys Lys Leu Gln Glu Gly
 50 55 60
 Cys Glu Glu Thr Leu Val Phe Ile Glu Thr Gly Thr Ala Arg Gly
 65 70 75
 Val Val Gly Phe Lys Gly Cys Ser Ser Ser Ser Tyr Pro Ala
 80 85 90
 Gln Ile Ser Tyr Leu Val Ser Pro Pro Gly Val Ser Ile Ala Ser
 95 100 105
 Tyr Ser Arg Val Cys Arg Ser Tyr Leu Cys Asn Asn Leu Thr Asn
 110 115 120
 Leu Glu Pro Phe Val Lys Leu Lys Ala Ser Thr Pro Lys Ser Ile
 125 130 135
 Thr Ser Ala Ser Cys Ser Cys Pro Thr Cys Val Gly Glu His Met

	140		145		150
Lys Asp Cys Leu Pro Asn Phe Val Thr	Thr Asn Ser Cys Pro Leu				
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Ala Ala Ser Thr Cys Tyr Ser Ser Thr	Leu Lys Phe Gln Ala Gly				
170	175				180
Phe Leu Asn Thr Thr Phe Leu Leu Met	Gly Cys Ala Arg Glu His				
185	190				195
Asn Gln Leu Leu Ala Asp Phe His His	Ile Gly Ser Ile Lys Val				
200	205				210
Thr Glu Val Leu Asn Ile Leu Glu Lys	Ser Gln Ile Val Gly Ala				
215	220				225
Ala Ser Ser Arg Gln Asp Pro Ala Trp	Gly Val Val Leu Gly Leu				
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Leu Phe Ala Phe Arg Asp					
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<210> 245

<211> 2594

<212> DNA

<213> Homo Sapien

<400> 245

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<211> 523

<212> PRT

<213> Homo Sapien

<400> 246

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Gly	Ile	Ala	Leu	Glu	Asp	Leu	Arg	Arg	Ala	Leu	Lys	Thr	Arg	Leu	35	40	45	
Gln	Met	Val	Cys	Val	Phe	Val	Met	Asn	Arg	Met	Asn	Ser	Gln	Asn	50	55	60	
Ser	Gly	Phe	Thr	Gln	Arg	Arg	Arg	Met	Ala	Leu	Gly	Ile	Val	Ile	65	70	75	
Leu	Leu	Leu	Val	Asp	Val	Ile	Trp	Val	Ala	Ser	Ser	Glu	Leu	Thr	80	85	90	
Ser	Tyr	Val	Phe	Thr	Gln	Tyr	Asn	Lys	Pro	Phe	Phe	Ser	Thr	Phe	95	100	105	
Ala	Lys	Thr	Ser	Met	Phe	Val	Leu	Tyr	Leu	Leu	Gly	Phe	Ile	Ile	110	115	120	
Trp	Lys	Pro	Trp	Arg	Gln	Gln	Cys	Thr	Arg	Gly	Leu	Arg	Gly	Lys	125	130	135	
His	Ala	Ala	Phe	Phe	Ala	Asp	Ala	Glu	Gly	Tyr	Phe	Ala	Ala	Cys	140	145	150	
Thr	Thr	Asp	Thr	Thr	Met	Asn	Ser	Ser	Leu	Ser	Glu	Pro	Leu	Tyr	155	160	165	
Val	Pro	Val	Lys	Phe	His	Asp	Leu	Pro	Ser	Glu	Lys	Pro	Glu	Ser	170	175	180	

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Leu	Glu	Ala	Lys	Leu	Ser	Arg	Met	Ser	Tyr	Pro	Val	Lys	Glu	Gln	
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Glu	Ser	Ile	Leu	Lys	Thr	Val	Gly	Lys	Leu	Thr	Ala	Thr	Gln	Val	
				230					235					240	
Ala	Lys	Ile	Ser	Phe	Phe	Phe	Cys	Phe	Val	Trp	Phe	Leu	Ala	Asn	
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Leu	Ser	Tyr	Gln	Glu	Ala	Leu	Ser	Asp	Thr	Gln	Val	Ala	Ile	Val	
				260					265					270	
Asn	Ile	Leu	Ser	Ser	Thr	Ser	Gly	Leu	Phe	Thr	Leu	Ile	Leu	Ala	
				275					280					285	
Ala	Val	Phe	Pro	Ser	Asn	Ser	Gly	Asp	Arg	Phe	Thr	Leu	Ser	Lys	
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Leu	Leu	Ala	Val	Ile	Leu	Ser	Ile	Gly	Gly	Val	Val	Leu	Val	Asn	
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Leu	Ala	Gly	Ser	Glu	Lys	Pro	Ala	Gly	Arg	Asp	Thr	Val	Gly	Ser	
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Ile	Trp	Ser	Leu	Ala	Gly	Ala	Met	Leu	Tyr	Ala	Val	Tyr	Ile	Val	
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Met	Ile	Lys	Arg	Lys	Val	Asp	Arg	Glu	Asp	Lys	Leu	Asp	Ile	Pro	
				350					355					360	
Met	Phe	Phe	Gly	Phe	Val	Gly	Leu	Phe	Asn	Leu	Leu	Leu	Leu	Trp	
				365					370					375	
Pro	Gly	Phe	Phe	Leu	Leu	His	Tyr	Thr	Gly	Phe	Glu	Asp	Phe	Glu	
				380					385					390	
Phe	Pro	Asn	Lys	Val	Val	Leu	Met	Cys	Ile	Ile	Ile	Asn	Gly	Leu	
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Ile	Gly	Thr	Val	Leu	Ser	Glu	Phe	Leu	Trp	Leu	Trp	Gly	Cys	Phe	
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Leu	Thr	Ser	Ser	Leu	Ile	Gly	Thr	Leu	Ala	Leu	Ser	Leu	Thr	Ile	
				425					430					435	
Pro	Leu	Ser	Ile	Ile	Ala	Asp	Met	Cys	Met	Gln	Lys	Val	Gln	Phe	
				440					445					450	
Ser	Trp	Leu	Phe	Phe	Ala	Gly	Ala	Ile	Pro	Val	Phe	Phe	Ser	Phe	
				455					460					465	
Phe	Ile	Val	Thr	Leu	Leu	Cys	His	Tyr	Asn	Asn	Trp	Asp	Pro	Val	

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Met	Val	Gly	Ile	Arg	Arg	Ile	Phe	Ala	Phe	Ile	Cys	Arg	Lys	His
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Arg	Ile	Gln	Arg	Val	Pro	Glu	Asp	Ser	Glu	Gln	Cys	Glu	Ser	Leu
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Ile	Ser	Met	His	Ser	Val	Ser	Gln	Glu	Asp	Gly	Ala	Ser		
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 <212> DNA
 <213> Homo Sapien

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<211> 241

<212> PRT

<213> Homo Sapien

<400> 248

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35 40 45

Ile His Pro Leu Trp Val Ile Thr Ala Ala His Cys Asn Leu Pro
50 55 60

Lys Leu Arg Val Ile Leu Gly Val Thr Ile Pro Ala Asp Ser Asn
65 70 75

Glu Lys His Leu Gln Val Ile Gly Tyr Glu Lys Met Ile His His
80 85 90

Pro His Phe Ser Val Thr Ser Ile Asp His Asp Ile Met Leu Ile
95 100 105

Lys Leu Lys Thr Glu Ala Glu Leu Asn Asp Tyr Val Lys Leu Ala
110 115 120

Asn Leu Pro Tyr Gln Thr Ile Ser Glu Asn Thr Met Cys Ser Val
125 130 135

Ser Thr Trp Ser Tyr Asn Val Cys Asp Ile Tyr Lys Glu Pro Asp
140 145 150

Ser Leu Gln Thr Val Asn Ile Ser Val Ile Ser Lys Pro Gln Cys
155 160 165

Arg Asp Ala Tyr Lys Thr Tyr Asn Ile Thr Glu Asn Met Leu Cys
170 175 180

Val Gly Ile Val Pro Gly Arg Arg Gln Pro Cys Lys Glu Val Ser
185 190 195

Ala Ala Pro Ala Ile Cys Asn Gly Met Leu Gln Gly Ile Leu Ser
200 205 210

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Lys Ile Phe Tyr Tyr Ile Pro Trp Ile Glu Asn Val Ile Gln Asn
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<213> Homo Sapien

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<211> 134
<212> PRT
<213> Homo Sapien

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Tyr Leu Phe Ile Ser Ser Lys Pro His Thr Lys Leu Asp Leu Gly
35 40 45
Leu Ser Leu Gln Thr Ala Gly Pro Glu Glu Val Ser Pro Asp Cys
50 55 60
Gln Gly Val Asn Thr Gly Met Ala Ala Glu Val Pro Lys Val Ser
65 70 75
Pro Leu Gln Gln Ser Tyr Ser Cys Leu Asn Pro Gln Leu Glu Ser
80 85 90
Asn Glu Gly Gln Ala Val Asn Ser Lys Arg Leu Leu His His Cys
95 100 105

Phe Met Ala Thr Val Thr Thr Ser Asp Ile Pro Gly Ser Pro Glu
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Glu Ala Ser Val Pro Asn Pro Asp Leu Cys Gly Pro Val Pro
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<212> DNA

<213> Homo Sapien

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 actgacatcc ctttactcag gcaaacagaa gttccaaccc cagactaggg 1450
 gtcaggcagc tagctaccta ccttgcccag tgctgaccg gacctcctcc 1500
 aggatacagc actggagttg gccaccacct cttctacttg ctgtctgaaa 1550
 aaacacctga ctagtacagc tgagatcttg gcttctcaac agggcaaaga 1600
 taccaggcct gctgctgagg tcaactgccac ttctcacatg ctgcttaagg 1650
 gagcacaat aaaggtattc gattttttaa aaaaaaaaaa aaaaaaaaaa 1700
 aaaaaaaaaa aaaa 1714

<210> 252

<211> 361

<212> PRT

<213> Homo Sapien

<400> 252

Met	Arg	Gly	Gln	Arg	Ser	Leu	Leu	Leu	Gly	Pro	Ala	Arg	Leu	Cys
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Leu	Arg	Leu	Leu	Leu	Leu	Leu	Gly	Tyr	Arg	Arg	Arg	Cys	Pro	Pro
				20					25					30
Leu	Leu	Arg	Gly	Leu	Val	Gln	Arg	Trp	Arg	Tyr	Gly	Lys	Val	Cys
				35					40					45
Leu	Arg	Ser	Leu	Leu	Tyr	Asn	Ser	Phe	Gly	Gly	Ser	Asp	Thr	Ala
				50					55					60
Val	Asp	Ala	Ala	Phe	Glu	Pro	Val	Tyr	Trp	Leu	Val	Asp	Asn	Val
				65					70					75
Ile	Arg	Trp	Phe	Gly	Val	Val	Phe	Val	Val	Leu	Val	Ile	Val	Leu
				80					85					90
Thr	Gly	Ser	Ile	Val	Ala	Ile	Ala	Tyr	Leu	Cys	Val	Leu	Pro	Leu
				95					100					105
Ile	Leu	Arg	Thr	Tyr	Ser	Val	Pro	Arg	Leu	Cys	Trp	His	Phe	Phe
				110					115					120
Tyr	Ser	His	Trp	Asn	Leu	Ile	Leu	Ile	Val	Phe	His	Tyr	Tyr	Gln
				125					130					135
Ala	Ile	Thr	Thr	Pro	Pro	Gly	Tyr	Pro	Pro	Gln	Gly	Arg	Asn	Asp

				140					145					150	
Ile	Ala	Thr	Val	Ser	Ile	Cys	Lys	Lys	Cys	Ile	Tyr	Pro	Lys	Pro	
				155					160					165	
Ala	Arg	Thr	His	His	Cys	Ser	Ile	Cys	Asn	Arg	Cys	Val	Leu	Lys	
				170					175					180	
Met	Asp	His	His	Cys	Pro	Trp	Leu	Asn	Asn	Cys	Val	Gly	His	Tyr	
				185					190					195	
Asn	His	Arg	Tyr	Phe	Phe	Ser	Phe	Cys	Phe	Phe	Met	Thr	Leu	Gly	
				200					205					210	
Cys	Val	Tyr	Cys	Ser	Tyr	Gly	Ser	Trp	Asp	Leu	Phe	Arg	Glu	Ala	
				215					220					225	
Tyr	Ala	Ala	Ile	Glu	Thr	Tyr	His	Gln	Thr	Pro	Pro	Pro	Thr	Phe	
				230					235					240	
Ser	Phe	Arg	Glu	Arg	Met	Thr	His	Lys	Ser	Leu	Val	Tyr	Leu	Trp	
				245					250					255	
Phe	Leu	Cys	Ser	Ser	Val	Ala	Leu	Ala	Leu	Gly	Ala	Leu	Thr	Val	
				260					265					270	
Trp	His	Ala	Val	Leu	Ile	Ser	Arg	Gly	Glu	Thr	Ser	Ile	Glu	Arg	
				275					280					285	
His	Ile	Asn	Lys	Lys	Glu	Arg	Arg	Arg	Leu	Gln	Ala	Lys	Gly	Arg	
				290					295					300	
Val	Phe	Arg	Asn	Pro	Tyr	Asn	Tyr	Gly	Cys	Leu	Asp	Asn	Trp	Lys	
				305					310					315	
Val	Phe	Leu	Gly	Val	Asp	Thr	Gly	Arg	His	Trp	Leu	Thr	Arg	Val	
				320					325					330	
Leu	Leu	Pro	Ser	Ser	His	Leu	Pro	His	Gly	Asn	Gly	Met	Ser	Trp	
				335					340					345	
Glu	Pro	Pro	Pro	Trp	Val	Thr	Ala	His	Ser	Ala	Ser	Val	Met	Ala	
				350					355					360	

Val

<210> 253

<211> 2016

<212> DNA

<213> Homo Sapien

<400> 253

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actttttcag gtatggggga gggccaggca ccatgaagcc agtgtgggtc 150

cagttcaata ttacaagaag attatcattg ccaatgggtt tcccaatcca 1650
agagaggtgg aaagttggta cctcaaagct ttggaaactt gctctatcaa 1700
caatcagatg cttgctgcag agcctttgct aagtcacatg caaatgggta 1750
cggagatcgt ggtacccact gtctgctccc tctgtgtcct catcactgct 1800
gttctactaa tgctcctcct gaggaggcag agctgagaca ggattatcaa 1850
ttttggagct tcataagaga atcttcagga tcttcctccc ttttctgctt 1900
tgagggtttc catacattgc tgttttcagg ttctacaata attacctttt 1950
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aaataagcag aaatta 2016

<210> 254

<211> 567

<212> PRT

<213> Homo Sapien

<400> 254

Met	Lys	Pro	Val	Trp	Val	Ala	Thr	Leu	Leu	Trp	Met	Leu	Leu	Leu	1	5	10	15
Val	Pro	Arg	Leu	Gly	Ala	Ala	Arg	Lys	Gly	Ser	Pro	Glu	Glu	Ala	20	25	30	
Ser	Phe	Tyr	Tyr	Gly	Thr	Phe	Pro	Leu	Gly	Phe	Ser	Trp	Gly	Val	35	40	45	
Gly	Ser	Ser	Ala	Tyr	Gln	Thr	Glu	Gly	Ala	Trp	Asp	Gln	Asp	Gly	50	55	60	
Lys	Gly	Pro	Ser	Ile	Trp	Asp	Val	Phe	Thr	His	Ser	Gly	Lys	Gly	65	70	75	
Lys	Val	Leu	Gly	Asn	Glu	Thr	Ala	Asp	Val	Ala	Cys	Asp	Gly	Tyr	80	85	90	
Tyr	Lys	Val	Gln	Glu	Asp	Ile	Ile	Leu	Leu	Arg	Glu	Leu	His	Val	95	100	105	
Asn	His	Tyr	Arg	Phe	Ser	Leu	Ser	Trp	Pro	Arg	Leu	Leu	Pro	Thr	110	115	120	
Gly	Ile	Arg	Ala	Glu	Gln	Val	Asn	Lys	Lys	Gly	Ile	Glu	Phe	Tyr	125	130	135	
Ser	Asp	Leu	Ile	Asp	Ala	Leu	Leu	Ser	Ser	Asn	Ile	Thr	Pro	Ile	140	145	150	
Val	Thr	Leu	His	His	Trp	Asp	Leu	Pro	Gln	Leu	Leu	Gln	Val	Lys	155	160	165	
Tyr	Gly	Gly	Trp	Gln	Asn	Val	Ser	Met	Ala	Asn	Tyr	Phe	Arg	Asp				

				170						175					180	
Tyr	Ala	Asn	Leu	Cys	Phe	Glu	Ala	Phe	Gly	Asp	Arg	Val	Lys	His		
				185					190					195		
Trp	Ile	Thr	Phe	Ser	Asp	Pro	Arg	Ala	Met	Ala	Glu	Lys	Gly	Tyr		
				200					205					210		
Glu	Thr	Gly	His	His	Ala	Pro	Gly	Leu	Lys	Leu	Arg	Gly	Thr	Gly		
				215					220					225		
Leu	Tyr	Lys	Ala	Ala	His	His	Ile	Ile	Lys	Ala	His	Ala	Lys	Thr		
				230					235					240		
Trp	His	Ser	Tyr	Asn	Thr	Thr	Trp	Arg	Ser	Lys	Gln	Gln	Gly	Leu		
				245					250					255		
Val	Gly	Ile	Ser	Leu	Asn	Cys	Asp	Trp	Gly	Glu	Pro	Val	Asp	Ile		
				260					265					270		
Ser	Asn	Pro	Lys	Asp	Leu	Glu	Ala	Ala	Glu	Arg	Tyr	Leu	Gln	Phe		
				275					280					285		
Cys	Leu	Gly	Trp	Phe	Ala	Asn	Pro	Ile	Tyr	Ala	Gly	Asp	Tyr	Pro		
				290					295					300		
Gln	Val	Met	Lys	Asp	Tyr	Ile	Gly	Arg	Lys	Ser	Ala	Glu	Gln	Gly		
				305					310					315		
Leu	Glu	Met	Ser	Arg	Leu	Pro	Val	Phe	Ser	Leu	Gln	Glu	Lys	Ser		
				320					325					330		
Tyr	Ile	Lys	Gly	Thr	Ser	Asp	Phe	Leu	Gly	Leu	Gly	His	Phe	Thr		
				335					340					345		
Thr	Arg	Tyr	Ile	Thr	Glu	Arg	Asn	Tyr	Pro	Ser	Arg	Gln	Gly	Pro		
				350					355					360		
Ser	Tyr	Gln	Asn	Asp	Arg	Asp	Leu	Ile	Glu	Leu	Val	Asp	Pro	Asn		
				365					370					375		
Trp	Pro	Asp	Leu	Gly	Ser	Lys	Trp	Leu	Tyr	Ser	Val	Pro	Trp	Gly		
				380					385					390		
Phe	Arg	Arg	Leu	Leu	Asn	Phe	Ala	Gln	Thr	Gln	Tyr	Gly	Asp	Pro		
				395					400					405		
Pro	Ile	Tyr	Val	Met	Glu	Asn	Gly	Ala	Ser	Gln	Lys	Phe	His	Cys		
				410					415					420		
Thr	Gln	Leu	Cys	Asp	Glu	Trp	Arg	Ile	Gln	Tyr	Leu	Lys	Gly	Tyr		
				425					430					435		
Ile	Asn	Glu	Met	Leu	Lys	Ala	Ile	Lys	Asp	Gly	Ala	Asn	Ile	Lys		
				440					445					450		
Gly	Tyr	Thr	Ser	Trp	Ser	Leu	Leu	Asp	Lys	Phe	Glu	Trp	Glu	Lys		
				455					460					465		

Gly	Tyr	Ser	Asp	Arg	Tyr	Gly	Phe	Tyr	Tyr	Val	Glu	Phe	Asn	Asp
				470					475					480
Arg	Asn	Lys	Pro	Arg	Tyr	Pro	Lys	Ala	Ser	Val	Gln	Tyr	Tyr	Lys
				485					490					495
Lys	Ile	Ile	Ile	Ala	Asn	Gly	Phe	Pro	Asn	Pro	Arg	Glu	Val	Glu
				500					505					510
Ser	Trp	Tyr	Leu	Lys	Ala	Leu	Glu	Thr	Cys	Ser	Ile	Asn	Asn	Gln
				515					520					525
Met	Leu	Ala	Ala	Glu	Pro	Leu	Leu	Ser	His	Met	Gln	Met	Val	Thr
				530					535					540
Glu	Ile	Val	Val	Pro	Thr	Val	Cys	Ser	Leu	Cys	Val	Leu	Ile	Thr
				545					550					555
Ala	Val	Leu	Leu	Met	Leu	Leu	Leu	Arg	Arg	Gln	Ser			
				560					565					

<210> 255
 <211> 1432
 <212> DNA
 <213> Homo Sapien

<400> 255
 cgccaagatg cgaaaggtgg ttttgatcac cggggctagc agtggcattg 50
 gcctggccct ctgcaagcgg ctgctggcgg aagatgatga gcttcatctg 100
 tgtttggcgt gcaggaacat gagcaaggca gaagctgtct gtgctgctct 150
 gctggcctct caccctactg ctgaggtcac cattgtccag gtggatgtca 200
 gcaacctgca gtcggtcttc cgggcctcca aggaacttaa gcaaagggtt 250
 cagagattag actgtatata tctaaatgct gggatcatgc ctaatccaca 300
 actaaatatc aaagcacttt tctttggcct cttttcaaga aaagtgattc 350
 atatgttctc cacagctgaa ggcctgctga cccagggtga taagatcact 400
 gctgatggac ttcaggaggt gtttgagacc aatgtctttg gccattttat 450
 cctgattcgg gaactggagc ctctcctctg tcacagtgac aatccatctc 500
 agctcatctg gacatcatct cgcagtgcaa ggaaatctaa tttcagcctc 550
 gaggacttcc agcacagcaa aggcaaggaa ccctacagct cttccaaata 600
 tgccactgac cttttgagtg tggctttgaa caggaacttc aaccagcagg 650
 gtctctattc caatgtggcc tgtccaggta cagcattgac caatttgaca 700
 tatggaattc tgcctccggt tatatggacg ctgttgatgc cggcaatatt 750
 gctacttcgc ttttttgcaa atgcattcac tttgacacca tataatggaa 800

cagaagctct ggtatggctt ttccaccaa agcctgaatc tctcaatcct 850
ctgatcaa atctgagtgc caccactggc tttggaagaa attatattat 900
gacccagaag atggacctag atgaagacac tgctgaaaaa ttttatcaaa 950
agttactgga actggaaaag cacattaggg tcactattca aaaaacagat 1000
aatcaggcca ggctcagtgg ctcatgccta taattccagc actttgggag 1050
gccaaggcag aaggatcact tgagaccagg agttcaagac cagcctgaga 1100
aacatagtga gcccttgtct ctacaaaaag aaataaaaat aatagctggg 1150
tgtgggtggca tgcgcatgta gtcccagcta ctcagaagga tgaggtggga 1200
ggatctcttg aggctgggag gcagagggtg cagtgaagctg agattgtgcc 1250
actgcactcc agcctgggtg acagcgagac cctgtctcaa aatatgtata 1300
tatttaatat atatataaaa ccagagctga caatgacact ctggaacatt 1350
gcataccttc tgtacattct ggggtacatg gatttctact gagttggata 1400
atatgcattt gtaataaact atgaactatg aa 1432

<210> 256
<211> 341
<212> PRT
<213> Homo Sapien

<400> 256
Met Arg Lys Val Val Leu Ile Thr Gly Ala Ser Ser Gly Ile Gly
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Leu Ala Leu Cys Lys Arg Leu Leu Ala Glu Asp Asp Glu Leu His
20 25 30
Leu Cys Leu Ala Cys Arg Asn Met Ser Lys Ala Glu Ala Val Cys
35 40 45
Ala Ala Leu Leu Ala Ser His Pro Thr Ala Glu Val Thr Ile Val
50 55 60
Gln Val Asp Val Ser Asn Leu Gln Ser Val Phe Arg Ala Ser Lys
65 70 75
Glu Leu Lys Gln Arg Phe Gln Arg Leu Asp Cys Ile Tyr Leu Asn
80 85 90
Ala Gly Ile Met Pro Asn Pro Gln Leu Asn Ile Lys Ala Leu Phe
95 100 105
Phe Gly Leu Phe Ser Arg Lys Val Ile His Met Phe Ser Thr Ala
110 115 120
Glu Gly Leu Leu Thr Gln Gly Asp Lys Ile Thr Ala Asp Gly Leu
125 130 135

Gln	Glu	Val	Phe	Glu	Thr	Asn	Val	Phe	Gly	His	Phe	Ile	Leu	Ile
				140					145					150
Arg	Glu	Leu	Glu	Pro	Leu	Leu	Cys	His	Ser	Asp	Asn	Pro	Ser	Gln
				155					160					165
Leu	Ile	Trp	Thr	Ser	Ser	Arg	Ser	Ala	Arg	Lys	Ser	Asn	Phe	Ser
				170					175					180
Leu	Glu	Asp	Phe	Gln	His	Ser	Lys	Gly	Lys	Glu	Pro	Tyr	Ser	Ser
				185					190					195
Ser	Lys	Tyr	Ala	Thr	Asp	Leu	Leu	Ser	Val	Ala	Leu	Asn	Arg	Asn
				200					205					210
Phe	Asn	Gln	Gln	Gly	Leu	Tyr	Ser	Asn	Val	Ala	Cys	Pro	Gly	Thr
				215					220					225
Ala	Leu	Thr	Asn	Leu	Thr	Tyr	Gly	Ile	Leu	Pro	Pro	Phe	Ile	Trp
				230					235					240
Thr	Leu	Leu	Met	Pro	Ala	Ile	Leu	Leu	Leu	Arg	Phe	Phe	Ala	Asn
				245					250					255
Ala	Phe	Thr	Leu	Thr	Pro	Tyr	Asn	Gly	Thr	Glu	Ala	Leu	Val	Trp
				260					265					270
Leu	Phe	His	Gln	Lys	Pro	Glu	Ser	Leu	Asn	Pro	Leu	Ile	Lys	Tyr
				275					280					285
Leu	Ser	Ala	Thr	Thr	Gly	Phe	Gly	Arg	Asn	Tyr	Ile	Met	Thr	Gln
				290					295					300
Lys	Met	Asp	Leu	Asp	Glu	Asp	Thr	Ala	Glu	Lys	Phe	Tyr	Gln	Lys
				305					310					315
Leu	Leu	Glu	Leu	Glu	Lys	His	Ile	Arg	Val	Thr	Ile	Gln	Lys	Thr
				320					325					330
Asp	Asn	Gln	Ala	Arg	Leu	Ser	Gly	Ser	Cys	Leu				
				335					340					

<210> 257
 <211> 1606
 <212> DNA
 <213> Homo Sapien

<400> 257
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 agccccattt ggcctgctgg gggagaagac ccgccaggtg tctctggagg 150
 tcatccctaa ctggctgggc cccctgcaga acctgcttca tatacgggca 200
 gtgggcacca attccacact gcactatgtg tggagcagcc tggggcctct 250

ggcagtggta atggtggcca ccaacacccc ccacagcacc ctgagcatca 300
 actggagcct cctgctatcc cctgagcccc atgggggcct gatggtgctc 350
 cctaaggaca gcattcagtt ttcttctgcc cttgttttta ccaggctgct 400
 tgagtttgac agcaccaacg tgtccgatac ggcagcaaag cttttgggaa 450
 gaccatatcc tccatactcc ttggccgatt tctcttgga caacatcact 500
 gattcattgg atcctgccac cctgagtgcc acatttcaag gccaccccat 550
 gaacgaccct accaggactt ttgccaatgg cagcctggcc ttcagggtcc 600
 aggccttttc cagggtccagc cgaccagccc aacccctcg cctcctgcac 650
 acagcagaca cctgtcagct agagggtggcc ctgattggag cctctccccg 700
 gggaaaccgt tccctgtttg ggctggaggt agccacattg ggccagggcc 750
 ctgactgccc ctcaatgcag gagcagcact ccatcgacga tgaatatgca 800
 ccggccgtct tccagttgga ccagctactg tggggctccc tcccatcagg 850
 ctttgcacag tggcgaccag tggcttactc ccagaagccg gggggccgag 900
 aatcagccct gccctgccaa gcttcccctc ttcattcctgc cttagcatac 950
 tctcttcccc agtcacccat tgtccgagcc ttctttgggt cccagaataa 1000
 cttctgtgcc ttcaatctga cgttcggggc ttccacaggc cctggctatt 1050
 gggaccaaca ctacctcagc tggtcgatgc tcctgggtgt gggcttccct 1100
 ccagtggacg gcttgctccc actagtcctg ggcattcatgg cagtggccct 1150
 gggtgcccca gggctcatgc tgctaggggg cggttggtt ctgctgctgc 1200
 accacaagaa gtactcagag taccagtcca taaattaagg cccgctctct 1250
 ggagggaagg acattactga acctgtcttg ctgtgcctcg aaactctgga 1300
 ggttggagca tcaagttcca gccggccctc tcaactcccc atcttgcttt 1350
 tctgtggaac ctgagaggcc agcctcgact tcctggagac ccccagggtg 1400
 ggcttccctc atactttggt gggggacttt ggaggcgggc aggggacagg 1450
 gctattgata aggtcccctt ggtgttgctt tcttgcatct ccacacattt 1500
 cccttggatg ggacttgcag gcctaaatga gaggcattct gactggttgg 1550
 ctgccctgga aggcaagaaa atagatttat tttttttcac agggaaaaaa 1600
 aaaaaa 1606

<210> 258

<211> 406

<212> PRT
<213> Homo Sapien

<400> 258

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Pro	Ser	Pro	Leu	Leu	Leu	Trp	Thr	Leu	Leu	Leu	Phe	Ala	Ala	Pro	
				20					25					30	
Phe	Gly	Leu	Leu	Gly	Glu	Lys	Thr	Arg	Gln	Val	Ser	Leu	Glu	Val	
				35					40					45	
Ile	Pro	Asn	Trp	Leu	Gly	Pro	Leu	Gln	Asn	Leu	Leu	His	Ile	Arg	
				50					55					60	
Ala	Val	Gly	Thr	Asn	Ser	Thr	Leu	His	Tyr	Val	Trp	Ser	Ser	Leu	
				65					70					75	
Gly	Pro	Leu	Ala	Val	Val	Met	Val	Ala	Thr	Asn	Thr	Pro	His	Ser	
				80					85					90	
Thr	Leu	Ser	Ile	Asn	Trp	Ser	Leu	Leu	Leu	Ser	Pro	Glu	Pro	Asp	
				95					100					105	
Gly	Gly	Leu	Met	Val	Leu	Pro	Lys	Asp	Ser	Ile	Gln	Phe	Ser	Ser	
				110					115					120	
Ala	Leu	Val	Phe	Thr	Arg	Leu	Leu	Glu	Phe	Asp	Ser	Thr	Asn	Val	
				125					130					135	
Ser	Asp	Thr	Ala	Ala	Lys	Pro	Leu	Gly	Arg	Pro	Tyr	Pro	Pro	Tyr	
				140					145					150	
Ser	Leu	Ala	Asp	Phe	Ser	Trp	Asn	Asn	Ile	Thr	Asp	Ser	Leu	Asp	
				155					160					165	
Pro	Ala	Thr	Leu	Ser	Ala	Thr	Phe	Gln	Gly	His	Pro	Met	Asn	Asp	
				170					175					180	
Pro	Thr	Arg	Thr	Phe	Ala	Asn	Gly	Ser	Leu	Ala	Phe	Arg	Val	Gln	
				185					190					195	
Ala	Phe	Ser	Arg	Ser	Ser	Arg	Pro	Ala	Gln	Pro	Pro	Arg	Leu	Leu	
				200					205					210	
His	Thr	Ala	Asp	Thr	Cys	Gln	Leu	Glu	Val	Ala	Leu	Ile	Gly	Ala	
				215					220					225	
Ser	Pro	Arg	Gly	Asn	Arg	Ser	Leu	Phe	Gly	Leu	Glu	Val	Ala	Thr	
				230					235					240	
Leu	Gly	Gln	Gly	Pro	Asp	Cys	Pro	Ser	Met	Gln	Glu	Gln	His	Ser	
				245					250					255	
Ile	Asp	Asp	Glu	Tyr	Ala	Pro	Ala	Val	Phe	Gln	Leu	Asp	Gln	Leu	
				260					265					270	

Leu	Trp	Gly	Ser	Leu	Pro	Ser	Gly	Phe	Ala	Gln	Trp	Arg	Pro	Val
				275					280					285
Ala	Tyr	Ser	Gln	Lys	Pro	Gly	Gly	Arg	Glu	Ser	Ala	Leu	Pro	Cys
				290					295					300
Gln	Ala	Ser	Pro	Leu	His	Pro	Ala	Leu	Ala	Tyr	Ser	Leu	Pro	Gln
				305					310					315
Ser	Pro	Ile	Val	Arg	Ala	Phe	Phe	Gly	Ser	Gln	Asn	Asn	Phe	Cys
				320					325					330
Ala	Phe	Asn	Leu	Thr	Phe	Gly	Ala	Ser	Thr	Gly	Pro	Gly	Tyr	Trp
				335					340					345
Asp	Gln	His	Tyr	Leu	Ser	Trp	Ser	Met	Leu	Leu	Gly	Val	Gly	Phe
				350					355					360
Pro	Pro	Val	Asp	Gly	Leu	Ser	Pro	Leu	Val	Leu	Gly	Ile	Met	Ala
				365					370					375
Val	Ala	Leu	Gly	Ala	Pro	Gly	Leu	Met	Leu	Leu	Gly	Gly	Gly	Leu
				380					385					390
Val	Leu	Leu	Leu	His	His	Lys	Lys	Tyr	Ser	Glu	Tyr	Gln	Ser	Ile
				395					400					405

Asn

<210> 259
 <211> 2024
 <212> DNA
 <213> Homo Sapien

<400> 259
 caggcgggcc cccgcgcggc agggccctgg accgcgcgg ctcccgggga 50
 tggtgagcaa ggcgctgctg cgcctcgtgt ctgccgtcaa ccgcaggagg 100
 atgaagctgc tgctgggcat cgccttgctg gcctacgtcg cctctgtttg 150
 gggcaacttc gttaatatga ggtctatcca ggaaaatggt gaactaaaaa 200
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tactggggcc acgtgaatcc aataggacct cgggcctgct acgatgaagg 750
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attttaataa aatattgaaa ctca 2024

<210> 260

<211> 420

<212> PRT

<213> Homo Sapien

<400> 260

Met	Val	Ser	Lys	Ala	Leu	Leu	Arg	Leu	Val	Ser	Ala	Val	Asn	Arg	
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Arg	Arg	Met	Lys	Leu	Leu	Leu	Gly	Ile	Ala	Leu	Leu	Ala	Tyr	Val	
				20					25					30	
Ala	Ser	Val	Trp	Gly	Asn	Phe	Val	Asn	Met	Arg	Ser	Ile	Gln	Glu	
				35					40					45	
Asn	Gly	Glu	Leu	Lys	Ile	Glu	Ser	Lys	Ile	Glu	Glu	Met	Val	Glu	
				50					55					60	
Pro	Leu	Arg	Glu	Lys	Ile	Arg	Asp	Leu	Glu	Lys	Ser	Phe	Thr	Gln	
				65					70					75	
Lys	Tyr	Pro	Pro	Val	Lys	Phe	Leu	Ser	Glu	Lys	Asp	Arg	Lys	Arg	
				80					85					90	
Ile	Leu	Ile	Thr	Gly	Gly	Ala	Gly	Phe	Val	Gly	Ser	His	Leu	Thr	
				95					100					105	
Asp	Lys	Leu	Met	Met	Asp	Gly	His	Glu	Val	Thr	Val	Val	Asp	Asn	
				110					115					120	
Phe	Phe	Thr	Gly	Arg	Lys	Arg	Asn	Val	Glu	His	Trp	Ile	Gly	His	
				125					130					135	
Glu	Asn	Phe	Glu	Leu	Ile	Asn	His	Asp	Val	Val	Glu	Pro	Leu	Tyr	
				140					145					150	
Ile	Glu	Val	Asp	Gln	Ile	Tyr	His	Leu	Ala	Ser	Pro	Ala	Ser	Pro	
				155					160					165	
Pro	Asn	Tyr	Met	Tyr	Asn	Pro	Ile	Lys	Thr	Leu	Lys	Thr	Asn	Thr	
				170					175					180	
Ile	Gly	Thr	Leu	Asn	Met	Leu	Gly	Leu	Ala	Lys	Arg	Val	Gly	Ala	
				185					190					195	
Arg	Leu	Leu	Leu	Ala	Ser	Thr	Ser	Glu	Val	Tyr	Gly	Asp	Pro	Glu	
				200					205					210	
Val	His	Pro	Gln	Ser	Glu	Asp	Tyr	Trp	Gly	His	Val	Asn	Pro	Ile	
				215					220					225	
Gly	Pro	Arg	Ala	Cys	Tyr	Asp	Glu	Gly	Lys	Arg	Val	Ala	Glu	Thr	
				230					235					240	
Met	Cys	Tyr	Ala	Tyr	Met	Lys	Gln	Glu	Gly	Val	Glu	Val	Arg	Val	
				245					250					255	

Ala	Arg	Ile	Phe	Asn	Thr	Phe	Gly	Pro	Arg	Met	His	Met	Asn	Asp
				260					265					270
Gly	Arg	Val	Val	Ser	Asn	Phe	Ile	Leu	Gln	Ala	Leu	Gln	Gly	Glu
				275					280					285
Pro	Leu	Thr	Val	Tyr	Gly	Ser	Gly	Ser	Gln	Thr	Arg	Ala	Phe	Gln
				290					295					300
Tyr	Val	Ser	Asp	Leu	Val	Asn	Gly	Leu	Val	Ala	Leu	Met	Asn	Ser
				305					310					315
Asn	Val	Ser	Ser	Pro	Val	Asn	Leu	Gly	Asn	Pro	Glu	Glu	His	Thr
				320					325					330
Ile	Leu	Glu	Phe	Ala	Gln	Leu	Ile	Lys	Asn	Leu	Val	Gly	Ser	Gly
				335					340					345
Ser	Glu	Ile	Gln	Phe	Leu	Ser	Glu	Ala	Gln	Asp	Asp	Pro	Gln	Lys
				350					355					360
Arg	Lys	Pro	Asp	Ile	Lys	Lys	Ala	Lys	Leu	Met	Leu	Gly	Trp	Glu
				365					370					375
Pro	Val	Val	Pro	Leu	Glu	Glu	Gly	Leu	Asn	Lys	Ala	Ile	His	Tyr
				380					385					390
Phe	Arg	Lys	Glu	Leu	Glu	Tyr	Gln	Ala	Asn	Asn	Gln	Tyr	Ile	Pro
				395					400					405
Lys	Pro	Lys	Pro	Ala	Arg	Ile	Lys	Lys	Gly	Arg	Thr	Arg	His	Ser
				410					415					420

<210> 261

<211> 882

<212> DNA

<213> Homo Sapien

<400> 261

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agaataaatt cagttgttta tggatcttgg gtctgtgttt ggtagccact 150
acatcttcca aaatcccatc catcactgac ccacacttta tagacaactg 200
catagaagcc cacaacgaat ggcgtggcaa agtcaaccct cccgcggccg 250
acatgaaata catgatttgg gataaagggt tagcaaagat ggctaaagca 300
tgggcaaacc agtgcaaatt tgaacataat gactgttttg ataaatcata 350
taaatagctat gcagcttttg aatatgttgg agaaaatatc tggttaggtg 400
gaataaagtc attcacacca agacatgcca ttacggcttg gtataatgaa 450
accaattttt atgattttga tagtctatca tgctccagag tctgtggcca 500

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ttatacacag ttagtttggg ccaattcatt ttatgtcggg tgtgcagttg 550
 caatgtgtcc taaccttggg ggagcttcaa ctgcaatatt tgtatgcaac 600
 tacggacctg caggaaattt tgcaaatatg cctccttacg caagaggaga 650
 atcttgctct ctctgctcaa aagaagagaa atgtgtaaag aacctctgca 700
 ggactccaca acttattata cctaaccaaa atccatttct gaagccaacg 750
 gggagagcac ctcagcagac agcctttaat ccattcagct taggttttct 800
 tcttctgaga atcttttaat gtcatttata tacaaaagaa attctcaa 850
 gttaaataa aggaatagtt tattgcttaa ta 882

<210> 262

<211> 242

<212> PRT

<213> Homo Sapien

<400> 262

Met	Ala	Leu	Lys	Asn	Lys	Phe	Ser	Cys	Leu	Trp	Ile	Leu	Gly	Leu
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Cys	Leu	Val	Ala	Thr	Thr	Ser	Ser	Lys	Ile	Pro	Ser	Ile	Thr	Asp
				20					25					30
Pro	His	Phe	Ile	Asp	Asn	Cys	Ile	Glu	Ala	His	Asn	Glu	Trp	Arg
				35					40					45
Gly	Lys	Val	Asn	Pro	Pro	Ala	Ala	Asp	Met	Lys	Tyr	Met	Ile	Trp
				50					55					60
Asp	Lys	Gly	Leu	Ala	Lys	Met	Ala	Lys	Ala	Trp	Ala	Asn	Gln	Cys
				65					70					75
Lys	Phe	Glu	His	Asn	Asp	Cys	Leu	Asp	Lys	Ser	Tyr	Lys	Cys	Tyr
				80					85					90
Ala	Ala	Phe	Glu	Tyr	Val	Gly	Glu	Asn	Ile	Trp	Leu	Gly	Gly	Ile
				95					100					105
Lys	Ser	Phe	Thr	Pro	Arg	His	Ala	Ile	Thr	Ala	Trp	Tyr	Asn	Glu
				110					115					120
Thr	Gln	Phe	Tyr	Asp	Phe	Asp	Ser	Leu	Ser	Cys	Ser	Arg	Val	Cys
				125					130					135
Gly	His	Tyr	Thr	Gln	Leu	Val	Trp	Ala	Asn	Ser	Phe	Tyr	Val	Gly
				140					145					150
Cys	Ala	Val	Ala	Met	Cys	Pro	Asn	Leu	Gly	Gly	Ala	Ser	Thr	Ala
				155					160					165
Ile	Phe	Val	Cys	Asn	Tyr	Gly	Pro	Ala	Gly	Asn	Phe	Ala	Asn	Met
				170					175					180

Pro	Pro	Tyr	Ala	Arg	Gly	Glu	Ser	Cys	Ser	Leu	Cys	Ser	Lys	Glu
				185					190					195
Glu	Lys	Cys	Val	Lys	Asn	Leu	Cys	Arg	Thr	Pro	Gln	Leu	Ile	Ile
				200					205					210
Pro	Asn	Gln	Asn	Pro	Phe	Leu	Lys	Pro	Thr	Gly	Arg	Ala	Pro	Gln
				215					220					225
Gln	Thr	Ala	Phe	Asn	Pro	Phe	Ser	Leu	Gly	Phe	Leu	Leu	Leu	Arg
				230					235					240

Ile Phe

<210> 263
 <211> 1687
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 1447, 1489, 1593
 <223> unknown base

<400> 263
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 ggctcctact tggttcggag gtcccgccgg cctcaggtca ctctcctgga 200
 cccaatgaa aagtacctgc tacgactgct agacaagacg actgtgagcc 250
 acaacaccaa gaggttccgc tttgccctgc ccaccgcca ccacactctg 300
 gggctgcctg tgggcaaaca tatctacctc tccacccgaa ttgatggcag 350
 cctggtcatc aggccataca ctctgtcac cagtgatgag gatcaaggct 400
 atgtggatct tgtcatcaag gtctacctga aggggtgtgca ccccaaattt 450
 cctgagggag ggaagatgtc tcagtaacctg gatagcctga aggttgggga 500
 tgtggtggag tttcgggggc caagcggggt gctcacttac actggaaaag 550
 ggcattttta cattcagccc aacaagaaat ctccaccaga accccgagtg 600
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 acagctgatc cgggccatcc tgaaagtccc tgaagatcca acccagtgt 700
 ttctgctttt tgccaaccag acagaaaagg atatcatctt gcgggaggac 750
 ttagaggaac tgcaggcccc ctatcccaat cgctttaage tctggttcac 800

	80	85	90
Gly Ser Leu Val	Ile Arg Pro Tyr Thr	Pro Val Thr Ser Asp	Glu
	95	100	105
Asp Gln Gly Tyr	Val Asp Leu Val Ile	Lys Val Tyr Leu Lys	Gly
	110	115	120
Val His Pro Lys	Phe Pro Glu Gly Gly	Lys Met Ser Gln Tyr	Leu
	125	130	135
Asp Ser Leu Lys	Val Gly Asp Val Val	Glu Phe Arg Gly Pro	Ser
	140	145	150
Gly Leu Leu Thr	Tyr Thr Gly Lys Gly	His Phe Asn Ile Gln	Pro
	155	160	165
Asn Lys Lys Ser	Pro Pro Glu Pro Arg	Val Ala Lys Lys Leu	Gly
	170	175	180
Met Ile Ala Gly	Gly Thr Gly Ile Thr	Pro Met Leu Gln Leu	Ile
	185	190	195
Arg Ala Ile Leu	Lys Val Pro Glu Asp	Pro Thr Gln Cys Phe	Leu
	200	205	210
Leu Phe Ala Asn	Gln Thr Glu Lys Asp	Ile Ile Leu Arg Glu	Asp
	215	220	225
Leu Glu Glu Leu	Gln Ala Arg Tyr Pro	Asn Arg Phe Lys Leu	Trp
	230	235	240
Phe Thr Leu Asp	His Pro Pro Lys Asp	Trp Ala Tyr Ser Lys	Gly
	245	250	255
Phe Val Thr Ala	Asp Met Ile Arg Glu	His Leu Pro Ala Pro	Gly
	260	265	270
Asp Asp Val Leu	Val Leu Leu Cys Gly	Pro Pro Pro Met Val	Gln
	275	280	285
Leu Ala Cys His	Pro Asn Leu Asp Lys	Leu Gly Tyr Ser Gln	Lys
	290	295	300
Met Arg Phe Thr	Tyr		
	305		

<210> 265
 <211> 996
 <212> DNA
 <213> Homo Sapien

<400> 265
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Arg	Arg	Tyr	Leu	Cys	Met	Asp	Phe	Arg	Gly	Asn	Ile	Phe	Gly	Ser	95	100	105
His	Tyr	Phe	Asp	Pro	Glu	Asn	Cys	Arg	Phe	Gln	His	Gln	Thr	Leu	110	115	120
Glu	Asn	Gly	Tyr	Asp	Val	Tyr	His	Ser	Pro	Gln	Tyr	His	Phe	Leu	125	130	135
Val	Ser	Leu	Gly	Arg	Ala	Lys	Arg	Ala	Phe	Leu	Pro	Gly	Met	Asn	140	145	150
Pro	Pro	Pro	Tyr	Ser	Gln	Phe	Leu	Ser	Arg	Arg	Asn	Glu	Ile	Pro	155	160	165
Leu	Ile	His	Phe	Asn	Thr	Pro	Ile	Pro	Arg	Arg	His	Thr	Arg	Ser	170	175	180
Ala	Glu	Asp	Asp	Ser	Glu	Arg	Asp	Pro	Leu	Asn	Val	Leu	Lys	Pro	185	190	195
Arg	Ala	Arg	Met	Thr	Pro	Ala	Pro	Ala	Ser	Cys	Ser	Gln	Glu	Leu	200	205	210
Pro	Ser	Ala	Glu	Asp	Asn	Ser	Pro	Met	Ala	Ser	Asp	Pro	Leu	Gly	215	220	225
Val	Val	Arg	Gly	Gly	Arg	Val	Asn	Thr	His	Ala	Gly	Gly	Thr	Gly	230	235	240
Pro	Glu	Gly	Cys	Arg	Pro	Phe	Ala	Lys	Phe	Ile					245	250	

<210> 267

<211> 2290

<212> DNA

<213> Homo Sapien

<400> 267

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acagtttcct ctggcggcat gtaaaggctc cacaaaggag ttgggagttc 150
aatgaggct gctgcggacg gcctgaggat ggaccccaag ccctggacct 200
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caggctgccc cgctgacggc caggggtgaag catgtgagga gccgccccgg 450
agccaagcag gagggaagag gctttcatag attctattca caaagaataa 500

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ccaccatttt gcaaggacca tgaggccact gtgcgtgaca tgctggtggc 550
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gagggcactg aggagggctc gccaaagagag ttcatttacc taaacaggta 650
caagcgggcg ggcgagtccc aggacaagtg cacctacacc ttcattgtgc 700
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<210> 268
<211> 493
<212> PRT
<213> Homo Sapien

<400> 268
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Ala Met Gly Ala Val Ala Gly Gln Glu Asp Gly Phe Glu Gly Thr
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Glu Glu Gly Ser Pro Arg Glu Phe Ile Tyr Leu Asn Arg Tyr Lys
35 40 45
Arg Ala Gly Glu Ser Gln Asp Lys Cys Thr Tyr Thr Phe Ile Val
50 55 60
Pro Gln Gln Arg Val Thr Gly Ala Ile Cys Val Asn Ser Lys Glu
65 70 75
Pro Glu Val Leu Leu Glu Asn Arg Val His Lys Gln Glu Leu Glu
80 85 90
Leu Leu Asn Asn Glu Leu Leu Lys Gln Lys Arg Gln Ile Glu Thr
95 100 105
Leu Gln Gln Leu Val Glu Val Asp Gly Gly Ile Val Ser Glu Val
110 115 120
Lys Leu Leu Arg Lys Glu Ser Arg Asn Met Asn Ser Arg Val Thr
125 130 135
Gln Leu Tyr Met Gln Leu Leu His Glu Ile Ile Arg Lys Arg Asp
140 145 150
Asn Ala Leu Glu Leu Ser Gln Leu Glu Asn Arg Ile Leu Asn Gln
155 160 165
Thr Ala Asp Met Leu Gln Leu Ala Ser Lys Tyr Lys Asp Leu Glu
170 175 180
His Lys Tyr Gln His Leu Ala Thr Leu Ala His Asn Gln Ser Glu
185 190 195

Ile	Ile	Ala	Gln	Leu	Glu	Glu	His	Cys	Gln	Arg	Val	Pro	Ser	Ala	200	205	210
Arg	Pro	Val	Pro	Gln	Pro	Pro	Pro	Ala	Ala	Pro	Pro	Arg	Val	Tyr	215	220	225
Gln	Pro	Pro	Thr	Tyr	Asn	Arg	Ile	Ile	Asn	Gln	Ile	Ser	Thr	Asn	230	235	240
Glu	Ile	Gln	Ser	Asp	Gln	Asn	Leu	Lys	Val	Leu	Pro	Pro	Pro	Leu	245	250	255
Pro	Thr	Met	Pro	Thr	Leu	Thr	Ser	Leu	Pro	Ser	Ser	Thr	Asp	Lys	260	265	270
Pro	Ser	Gly	Pro	Trp	Arg	Asp	Cys	Leu	Gln	Ala	Leu	Glu	Asp	Gly	275	280	285
His	Asp	Thr	Ser	Ser	Ile	Tyr	Leu	Val	Lys	Pro	Glu	Asn	Thr	Asn	290	295	300
Arg	Leu	Met	Gln	Val	Trp	Cys	Asp	Gln	Arg	His	Asp	Pro	Gly	Gly	305	310	315
Trp	Thr	Val	Ile	Gln	Arg	Arg	Leu	Asp	Gly	Ser	Val	Asn	Phe	Phe	320	325	330
Arg	Asn	Trp	Glu	Thr	Tyr	Lys	Gln	Gly	Phe	Gly	Asn	Ile	Asp	Gly	335	340	345
Glu	Tyr	Trp	Leu	Gly	Leu	Glu	Asn	Ile	Tyr	Trp	Leu	Thr	Asn	Gln	350	355	360
Gly	Asn	Tyr	Lys	Leu	Leu	Val	Thr	Met	Glu	Asp	Trp	Ser	Gly	Arg	365	370	375
Lys	Val	Phe	Ala	Glu	Tyr	Ala	Ser	Phe	Arg	Leu	Glu	Pro	Glu	Ser	380	385	390
Glu	Tyr	Tyr	Lys	Leu	Arg	Leu	Gly	Arg	Tyr	His	Gly	Asn	Ala	Gly	395	400	405
Asp	Ser	Phe	Thr	Trp	His	Asn	Gly	Lys	Gln	Phe	Thr	Thr	Leu	Asp	410	415	420
Arg	Asp	His	Asp	Val	Tyr	Thr	Gly	Asn	Cys	Ala	His	Tyr	Gln	Lys	425	430	435
Gly	Gly	Trp	Trp	Tyr	Asn	Ala	Cys	Ala	His	Ser	Asn	Leu	Asn	Gly	440	445	450
Val	Trp	Tyr	Arg	Gly	Gly	His	Tyr	Arg	Ser	Arg	Tyr	Gln	Asp	Gly	455	460	465
Val	Tyr	Trp	Ala	Glu	Phe	Arg	Gly	Gly	Ser	Tyr	Ser	Leu	Lys	Lys	470	475	480
Val	Val	Met	Met	Ile	Arg	Pro	Asn	Pro	Asn	Thr	Phe	His					

<210> 269
 <211> 1869
 <212> DNA
 <213> Homo Sapien

<400> 269
 gccgagctga gcggatcctc acatgactgt gatccgattc tttccagcgg 50
 cttctgcaac caagcgggtc ttacccccgg tcctccgcgt ctccagtcct 100
 cgcacctgga accccaacgt ccccgagagt ccccgaaatcc ccgctcccag 150
 gctacctaag aggatgagcg gtgctccgac ggccgggggca gccctgatgc 200
 tctgcgcgcg caccgccgtg ctactgagcg ctcaaggcgg acccgtgcag 250
 tccaagtcgc cgcgctttgc gtccctgggac gagatgaatg tcctggcgca 300
 cggactcctg cagctcggcc aggggctgcg cgaacacgcg gagcgcaccc 350
 gcagtcagct gagcgcgctg gagcggcgcc tgagcgcgtg cgggtccgcc 400
 tgtcagggaa ccgaggggtc caccgacctc ccgttagccc ctgagagccg 450
 ggtggaccct gaggtccttc acagcctgca gacacaactc aaggctcaga 500
 acagcaggat ccagcaactc ttccacaagg tggcccagca gcagcggcac 550
 ctggagaagc agcacctgcg aattcagcat ctgcaaagcc agtttggcct 600
 cctggaccac aagcacctag accatgaggt ggccaagcct gcccgaagaa 650
 agaggctgcc cgagatggcc cagccagttg acccggtca caatgtcagc 700
 cgctgcacc ggctgcccag ggattgccag gagctgttcc aggttgggga 750
 gaggcagagt ggactatttg aaatccagcc tcaggggtct ccgccathtt 800
 tgggtgaactg caagatgacc tcagatggag gctggacagt aattcagagg 850
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 ggggtttggg gatccccacg gcgagttctg gctgggtctg gagaaggctc 950
 atagcatcac gggggaccgc aacagccgcc tggccgtgca gctgcgggac 1000
 tgggatggca acgccaggtt gctgcagttc tccgtgcacc tgggtggcga 1050
 ggacacggcc tatagcctgc agctcaactgc acccgtggcc ggccagctgg 1100
 gcgccaccac cgtcccaccc agcggcctct ccgtaccctt ctccacttgg 1150
 gaccaggatc acgacctccg cagggacaag aactgcgcca agagcctctc 1200
 tggaggctgg tggtttggca cctgcagcca ttccaacctc aacggccagt 1250

acttccgctc catccacag cagcggcaga agcttaagaa gggaatcttc 1300
 tggaagacct ggcggggccc ctactacccg ctgcaggcca ccaccatggt 1350
 gatccagccc atggcagcag aggcagcctc ctagcgtcct ggctgggcct 1400
 ggtcccaggc ccacgaaaga cggtgactct tggctctgcc cgaggatgtg 1450
 gccgttcctt gcctgggcag gggctccaag gaggggcat ctggaaactt 1500
 gtggacagag aagaagacca cgactggaga agcccccttt ctgagtgcag 1550
 gggggctgca tgcgttgctt cctgagatcg aggctgcagg atatgctcag 1600
 actctagagg cgtggaccaa ggggcatgga gcttcactcc ttgctggcca 1650
 gggagttggg gactcagagg gaccacttgg ggccagccag actggcctca 1700
 atggcggact cagtcacatt gactgacggg gaccagggct tgtgtgggtc 1750
 gagagcgcgc tcatggtgct ggtgctgttg tgtgtaggct ccctggggac 1800
 acaagcaggc gccaatggtg tctgggcgga gctcacagag ttcttggaat 1850
 aaaagcaacc tcagaacac 1869

<210> 270
 <211> 453
 <212> PRT
 <213> Homo Sapien

<400> 270
 Met Thr Val Ile Arg Phe Phe Pro Ala Ala Ser Ala Thr Lys Arg
 1 5 10 15
 Val Leu Pro Pro Val Leu Arg Val Ser Ser Pro Arg Thr Trp Asn
 20 25 30
 Pro Asn Val Pro Glu Ser Pro Arg Ile Pro Ala Pro Arg Leu Pro
 35 40 45
 Lys Arg Met Ser Gly Ala Pro Thr Ala Gly Ala Ala Leu Met Leu
 50 55 60
 Cys Ala Ala Thr Ala Val Leu Leu Ser Ala Gln Gly Gly Pro Val
 65 70 75
 Gln Ser Lys Ser Pro Arg Phe Ala Ser Trp Asp Glu Met Asn Val
 80 85 90
 Leu Ala His Gly Leu Leu Gln Leu Gly Gln Gly Leu Arg Glu His
 95 100 105
 Ala Glu Arg Thr Arg Ser Gln Leu Ser Ala Leu Glu Arg Arg Leu
 110 115 120
 Ser Ala Cys Gly Ser Ala Cys Gln Gly Thr Glu Gly Ser Thr Asp
 125 130 135

Leu	Pro	Leu	Ala	Pro	Glu	Ser	Arg	Val	Asp	Pro	Glu	Val	Leu	His
				140					145					150
Ser	Leu	Gln	Thr	Gln	Leu	Lys	Ala	Gln	Asn	Ser	Arg	Ile	Gln	Gln
				155					160					165
Leu	Phe	His	Lys	Val	Ala	Gln	Gln	Gln	Arg	His	Leu	Glu	Lys	Gln
				170					175					180
His	Leu	Arg	Ile	Gln	His	Leu	Gln	Ser	Gln	Phe	Gly	Leu	Leu	Asp
				185					190					195
His	Lys	His	Leu	Asp	His	Glu	Val	Ala	Lys	Pro	Ala	Arg	Arg	Lys
				200					205					210
Arg	Leu	Pro	Glu	Met	Ala	Gln	Pro	Val	Asp	Pro	Ala	His	Asn	Val
				215					220					225
Ser	Arg	Leu	His	Arg	Leu	Pro	Arg	Asp	Cys	Gln	Glu	Leu	Phe	Gln
				230					235					240
Val	Gly	Glu	Arg	Gln	Ser	Gly	Leu	Phe	Glu	Ile	Gln	Pro	Gln	Gly
				245					250					255
Ser	Pro	Pro	Phe	Leu	Val	Asn	Cys	Lys	Met	Thr	Ser	Asp	Gly	Gly
				260					265					270
Trp	Thr	Val	Ile	Gln	Arg	Arg	His	Asp	Gly	Ser	Val	Asp	Phe	Asn
				275					280					285
Arg	Pro	Trp	Glu	Ala	Tyr	Lys	Ala	Gly	Phe	Gly	Asp	Pro	His	Gly
				290					295					300
Glu	Phe	Trp	Leu	Gly	Leu	Glu	Lys	Val	His	Ser	Ile	Thr	Gly	Asp
				305					310					315
Arg	Asn	Ser	Arg	Leu	Ala	Val	Gln	Leu	Arg	Asp	Trp	Asp	Gly	Asn
				320					325					330
Ala	Glu	Leu	Leu	Gln	Phe	Ser	Val	His	Leu	Gly	Gly	Glu	Asp	Thr
				335					340					345
Ala	Tyr	Ser	Leu	Gln	Leu	Thr	Ala	Pro	Val	Ala	Gly	Gln	Leu	Gly
				350					355					360
Ala	Thr	Thr	Val	Pro	Pro	Ser	Gly	Leu	Ser	Val	Pro	Phe	Ser	Thr
				365					370					375
Trp	Asp	Gln	Asp	His	Asp	Leu	Arg	Arg	Asp	Lys	Asn	Cys	Ala	Lys
				380					385					390
Ser	Leu	Ser	Gly	Gly	Trp	Trp	Phe	Gly	Thr	Cys	Ser	His	Ser	Asn
				395					400					405
Leu	Asn	Gly	Gln	Tyr	Phe	Arg	Ser	Ile	Pro	Gln	Gln	Arg	Gln	Lys
				410					415					420
Leu	Lys	Lys	Gly	Ile	Phe	Trp	Lys	Thr	Trp	Arg	Gly	Arg	Tyr	Tyr

425

430

435

Pro Leu Gln Ala Thr Thr Met Leu Ile Gln Pro Met Ala Ala Glu
 440 445 450

Ala Ala Ser

<210> 271

<211> 1174

<212> DNA

<213> Homo Sapien

<400> 271

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 tgtgacagag gggaacaaga tggcggcgcc gaaggggagc ctctgggtga 100
 ggaccecaact ggggctcccc cgcgtgctgc tgctgaccat ggccttggcc 150
 ggaggttcgg ggaccgcttc ggctgaagca tttgactcgg tcttgggtga 200
 tacggcgtct tgccaccggg cctgtcagtt gacctacccc ttgcacacct 250
 accctaagga agaggagttg tacgcatgtc agagagggtg caggctgttt 300
 tcaatttgtc agtttgtgga tgatggaatt gacttaaata gaactaaatt 350
 ggaatgtgaa tctgcatgta cagaagcata ttcccaatct gatgagcaat 400
 atgcttgcca tcttggttgc cagaatcagc tgccattcgc tgaactgaga 450
 caagaacaac ttatgtccct gatgccaaaa atgcacctac tctttcctct 500
 aactctgggtg aggtcattct ggagtgacat gatggactcc gcacagagct 550
 tcataacctc ttcattggact ttttatcttc aagccgatga cggaaaaata 600
 gttatatattcc agtctaagcc agaaatccag tacgcaccac atttggagca 650
 ggagcctaca aatttgagag aatcatctct aagcaaaatg tcctatctgc 700
 aaatgagaaa ttcacaagcg cacaggaatt ttcttgaaga tggagaaagt 750
 gatggctttt taagatgcct ctctcttaac tctgggtgga ttttaactac 800
 aactcttgct ctctcgggtga tggatttgc ttggatttgc tgtgcaactg 850
 ttgctacagc tgtggagcag tatgttccct ctgagaagct gaggatctat 900
 ggtgacttgg agtttatgaa tgaacaaaag ctaaacagat atccagcttc 950
 ttctcttggtg gttgttagat ctaaaactga agatcatgaa gaagcagggc 1000
 ctctacctac aaaagtgaat cttgctcatt ctgaaattta agcatttttc 1050
 ttttaaaaga caagtgtaat agacatctaa aattccactc ctcatagagc 1100

ttttaaaatg gtttcattgg atataggcct taagaaatca ctataaaatg 1150

caaataaagt tactcaaatc tgtg 1174

<210> 272

<211> 323

<212> PRT

<213> Homo Sapien

<400> 272

Met	Ala	Ala	Pro	Lys	Gly	Ser	Leu	Trp	Val	Arg	Thr	Gln	Leu	Gly	
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Leu	Pro	Pro	Leu	Leu	Leu	Leu	Thr	Met	Ala	Leu	Ala	Gly	Gly	Ser	
				20					25					30	
Gly	Thr	Ala	Ser	Ala	Glu	Ala	Phe	Asp	Ser	Val	Leu	Gly	Asp	Thr	
				35					40					45	
Ala	Ser	Cys	His	Arg	Ala	Cys	Gln	Leu	Thr	Tyr	Pro	Leu	His	Thr	
				50					55					60	
Tyr	Pro	Lys	Glu	Glu	Glu	Leu	Tyr	Ala	Cys	Gln	Arg	Gly	Cys	Arg	
				65					70					75	
Leu	Phe	Ser	Ile	Cys	Gln	Phe	Val	Asp	Asp	Gly	Ile	Asp	Leu	Asn	
				80					85					90	
Arg	Thr	Lys	Leu	Glu	Cys	Glu	Ser	Ala	Cys	Thr	Glu	Ala	Tyr	Ser	
				95					100					105	
Gln	Ser	Asp	Glu	Gln	Tyr	Ala	Cys	His	Leu	Gly	Cys	Gln	Asn	Gln	
				110					115					120	
Leu	Pro	Phe	Ala	Glu	Leu	Arg	Gln	Glu	Gln	Leu	Met	Ser	Leu	Met	
				125					130					135	
Pro	Lys	Met	His	Leu	Leu	Phe	Pro	Leu	Thr	Leu	Val	Arg	Ser	Phe	
				140					145					150	
Trp	Ser	Asp	Met	Met	Asp	Ser	Ala	Gln	Ser	Phe	Ile	Thr	Ser	Ser	
				155					160					165	
Trp	Thr	Phe	Tyr	Leu	Gln	Ala	Asp	Asp	Gly	Lys	Ile	Val	Ile	Phe	
				170					175					180	
Gln	Ser	Lys	Pro	Glu	Ile	Gln	Tyr	Ala	Pro	His	Leu	Glu	Gln	Glu	
				185					190					195	
Pro	Thr	Asn	Leu	Arg	Glu	Ser	Ser	Leu	Ser	Lys	Met	Ser	Tyr	Leu	
				200					205					210	
Gln	Met	Arg	Asn	Ser	Gln	Ala	His	Arg	Asn	Phe	Leu	Glu	Asp	Gly	
				215					220					225	
Glu	Ser	Asp	Gly	Phe	Leu	Arg	Cys	Leu	Ser	Leu	Asn	Ser	Gly	Trp	
				230					235					240	

Ile	Leu	Thr	Thr	Thr	Leu	Val	Leu	Ser	Val	Met	Val	Leu	Leu	Trp
				245					250					255
Ile	Cys	Cys	Ala	Thr	Val	Ala	Thr	Ala	Val	Glu	Gln	Tyr	Val	Pro
				260					265					270
Ser	Glu	Lys	Leu	Ser	Ile	Tyr	Gly	Asp	Leu	Glu	Phe	Met	Asn	Glu
				275					280					285
Gln	Lys	Leu	Asn	Arg	Tyr	Pro	Ala	Ser	Ser	Leu	Val	Val	Val	Arg
				290					295					300
Ser	Lys	Thr	Glu	Asp	His	Glu	Glu	Ala	Gly	Pro	Leu	Pro	Thr	Lys
				305					310					315
Val	Asn	Leu	Ala	His	Ser	Glu	Ile							
				320										

<210> 273
 <211> 1200
 <212> DNA
 <213> Homo Sapien

<400> 273
 cccacgcgtc cgaacctctc cagcgatggg agccgcccgc ctgctgccc 50
 acctcactct gtgcttacag ctgctgattc tctgctgtca aactcagtac 100
 gtgagggacc agggcgccat gaccgaccag ctgagcaggc ggcagatccg 150
 cgagtaccaa ctctacagca ggaccagtgg caagcacgtg caggtcaccg 200
 ggcgtcgcat ctccgccacc gccgaggacg gcaacaagtt tgccaagctc 250
 atagtggaga cggacacggt tggcagccgg gttcgcatca aaggggctga 300
 gagtgagaag tacatctgta tgaacaagag gggcaagctc atcgggaagc 350
 ccagcgggaa gagcaaagac tgcgtgttca cggagatcgt gctggagaac 400
 aactatacgg ccttccagaa cgcccggcac gagggctggg tcatggcctt 450
 cacgcggcag gggcgggccc gccaggcttc ccgcagccgc cagaaccagc 500
 gcgaggccca cttcatcaag cgctctacc aaggccagct gcccttcccc 550
 aaccacgccg agaagcagaa gcagttcgag tttgtgggct ccgccccac 600
 ccgcccggacc aagcgcacac ggcggcccca gccctcagc tagtctggga 650
 ggcagggggc agcagcccct gggccgcctc cccaccctt tcccttctta 700
 atccaaggac tgggctgggg tggcgggagg ggagccagat ccccgaggga 750
 ggaccctgag ggccgcgaag catccgagcc cccagctggg aaggggcagg 800
 ccggtgcccc aggggcggct ggcacagtgc ccccttcccg gacgggtggc 850

aggccctgga gaggaactga gtgtcaccct gatctcaggc caccagcctc 900
 tgccggcctc ccagccgggc tcctgaagcc cgctgaaagg tcagcgactg 950
 aaggccttgc agacaaccgt ctggagggtgg ctgtcctcaa aatctgcttc 1000
 tcggatctcc ctcaagtctgc cccagagcccc caaactcctc ctggctagac 1050
 tgtaggaagg gactttttgtt tgttttgtttg tttcaggaaa aaagaaaggg 1100
 agagagagga aaatagaggg ttgtccactc ctcacattcc acgacccagg 1150
 cctgcacccc accccaact cccagcccccga gaataaaacc attttcctgc 1200

<210> 274

<211> 205

<212> PRT

<213> Homo Sapien

<400> 274

Met	Gly	Ala	Ala	Arg	Leu	Leu	Pro	Asn	Leu	Thr	Leu	Cys	Leu	Gln
1				5					10					15
Leu	Leu	Ile	Leu	Cys	Cys	Gln	Thr	Gln	Tyr	Val	Arg	Asp	Gln	Gly
				20					25					30
Ala	Met	Thr	Asp	Gln	Leu	Ser	Arg	Arg	Gln	Ile	Arg	Glu	Tyr	Gln
				35					40					45
Leu	Tyr	Ser	Arg	Thr	Ser	Gly	Lys	His	Val	Gln	Val	Thr	Gly	Arg
				50					55					60
Arg	Ile	Ser	Ala	Thr	Ala	Glu	Asp	Gly	Asn	Lys	Phe	Ala	Lys	Leu
				65					70					75
Ile	Val	Glu	Thr	Asp	Thr	Phe	Gly	Ser	Arg	Val	Arg	Ile	Lys	Gly
				80					85					90
Ala	Glu	Ser	Glu	Lys	Tyr	Ile	Cys	Met	Asn	Lys	Arg	Gly	Lys	Leu
				95					100					105
Ile	Gly	Lys	Pro	Ser	Gly	Lys	Ser	Lys	Asp	Cys	Val	Phe	Thr	Glu
				110					115					120
Ile	Val	Leu	Glu	Asn	Asn	Tyr	Thr	Ala	Phe	Gln	Asn	Ala	Arg	His
				125					130					135
Glu	Gly	Trp	Phe	Met	Ala	Phe	Thr	Arg	Gln	Gly	Arg	Pro	Arg	Gln
				140					145					150
Ala	Ser	Arg	Ser	Arg	Gln	Asn	Gln	Arg	Glu	Ala	His	Phe	Ile	Lys
				155					160					165
Arg	Leu	Tyr	Gln	Gly	Gln	Leu	Pro	Phe	Pro	Asn	His	Ala	Glu	Lys
				170					175					180
Gln	Lys	Gln	Phe	Glu	Phe	Val	Gly	Ser	Ala	Pro	Thr	Arg	Arg	Thr
				185					190					195

Lys Arg Thr Arg Arg Pro Gln Pro Leu Thr
 200 205

<210> 275
 <211> 715
 <212> DNA
 <213> Homo Sapien

<400> 275
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 attttcactc tgtttttatt ctctgtccta tttgccatct cagaagtgcg 100
 gagcaaggag tctgtgagac tctgtgggct agaatacata cggacagtca 150
 tctatatctg tgctagctcc aggtggagaa ggcattctgga ggggatccct 200
 caagctcagc aagctgagac aggaaactcc ttccagctcc cacataaacg 250
 tgagttttct gaggaaaatc cagcgcaaaa ccttccgaag gtggatgcct 300
 caggggaaga ccgtctttgg ggtggacaga tgcccactga agagctttgg 350
 aagtcaaaga agcattcagt gatgtcaaga caagatttac aaactttgtg 400
 ttgcactgat ggctgttcca tgactgattt gagtgtcttt tgctaagaca 450
 agagcaaata cccaatgggt ggcagagctt tatcacatgt ttaattacag 500
 tgttttactg cctggtagaa cactaatatt gtgttattaa aatgatggct 550
 tttgggtagg caaaacttct tttctaaaag gtatagctga gcggttgaaa 600
 ccacagtgat ctctattttc tccctttgcc aaggttaatg aactgttctt 650
 ttcaaattct actaatgctt tgaaatttca aatgctgcgc aaaattgcaa 700
 taaaaatgct ataaa 715

<210> 276
 <211> 135
 <212> PRT
 <213> Homo Sapien

<400> 276
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 Ala Ile Ser Glu Val Arg Ser Lys Glu Ser Val Arg Leu Cys Gly
 20 25 30
 Leu Glu Tyr Ile Arg Thr Val Ile Tyr Ile Cys Ala Ser Ser Arg
 35 40 45
 Trp Arg Arg His Leu Glu Gly Ile Pro Gln Ala Gln Gln Ala Glu
 50 55 60
 Thr Gly Asn Ser Phe Gln Leu Pro His Lys Arg Glu Phe Ser Glu

				65						70					75
Glu	Asn	Pro	Ala	Gln	Asn	Leu	Pro	Lys	Val	Asp	Ala	Ser	Gly	Glu	
				80					85					90	
Asp	Arg	Leu	Trp	Gly	Gly	Gln	Met	Pro	Thr	Glu	Glu	Leu	Trp	Lys	
				95					100					105	
Ser	Lys	Lys	His	Ser	Val	Met	Ser	Arg	Gln	Asp	Leu	Gln	Thr	Leu	
				110					115					120	
Cys	Cys	Thr	Asp	Gly	Cys	Ser	Met	Thr	Asp	Leu	Ser	Ala	Leu	Cys	
				125					130					135	

<210> 277
 <211> 3355
 <212> DNA
 <213> Homo Sapien

<400> 277
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 ctacttaaaa ttacataggt ggcttgtcaa attcaattga ttagtattgt 150
 aaaaggaaaa agaagttcct tcttacagct tggattcaac ggtccaaaac 200
 aaaaatgcag ctgccattaa agtctcagat gaacaaactt ctacactgat 250
 ttttaaaatc aagaataagg gcagcaagtt tctggattca ctgaatcaac 300
 agacacaaaa agctggcaat atagcaacta tgaagagaaa agctactaat 350
 aaaattaacc caacgcatag aagacttttt tttctcttct aaaaacaact 400
 aagtaaagac ttaaatttaa acacatcatt ttacaacctc atttcaaaat 450
 gaagactttt acctggaccc taggtgtgct attcttccta ctagtggaca 500
 ctggacattg cagaggtgga caattcaaaa ttaaaaaaat aaaccagaga 550
 agataccctc gtgccacaga tggtaaagag gaagcaaaga aatgtgcata 600
 cacattcctg gtacctgaac aaagaataac agggccaatc tgtgtcaaca 650
 ccaaggggca agatgcaagt accattaaag acatgatcac caggatggac 700
 cttgaaaacc tgaaggatgt gctctccagg cagaagcggg agatagatgt 750
 tctgcaactg gtggtggatg tagatggaaa cattgtgaat gaggtaaagc 800
 tgctgagaaa ggaaagccgt aacatgaact ctctgtttac tcaactctat 850
 atgcaattat tacatgagat tatccgtaag agggataatt cacttgaact 900
 ttcccaactg gaaaacaaaa tcctcaatgt caccacagaa atgttgaaga 950

tggcaacaag atacagggaa ctagagggtga aatacgcttc cttgactgat 1000
 cttgtcaata accaatctgt gatgatcact ttgttggaag aacagtgctt 1050
 gaggatattt tcccgacaag acacccatgt gtctcccca cttgtccagg 1100
 tgggtgccaca acatattcct aacagccaac agtatactcc tgggtctgctg 1150
 ggaggtaacg agattcagag ggatccagggt tatcccagag atttaatgcc 1200
 accacctgat ctggcaactt ctcccaccaa aagccctttc aagataccac 1250
 cggtaacttt catcaatgaa ggaccattca aagactgtca gcaagcaaaa 1300
 gaagctgggc attcgggtcag tgggatttat atgattaaac ctgaaaacag 1350
 caatggacca atgcagttat ggtgtgaaaa cagtttggac cctggggggtt 1400
 ggactgttat tcagaaaaga acagacggct ctgtcaactt cttcagaaat 1450
 tgggaaaatt ataagaaagg gtttggaaac attgacggag aatactggct 1500
 tggactggaa aatatctata tgcttagcaa tcaagataat tacaagttat 1550
 tgattgaatt agaagactgg agtgataaaa aagtctatgc agaatacagc 1600
 agctttcgtc tggaaacctga aagtgaattc tatagactgc gcctgggaac 1650
 ttaccaggga aatgcagggg attctatgat gtggcataat ggtaaacaat 1700
 tcaccacact ggacagagat aaagatatgt atgcaggaaa ctgcgcccac 1750
 tttcataaag gaggctggtg gtacaatgcc tgtgcacatt ctaacctaaa 1800
 tggagtatgg tacagaggag gccattacag aagcaagcac caagatggaa 1850
 ttttctgggc cgaatacaga ggcgggtcat actccttaag agcagttcag 1900
 atgatgatca agcctattga ctgaagagag acactcgcca atttaaata 1950
 cacagaactt tgtacttttc agctcttaaa aatgtaaata ttacatgtat 2000
 attacttggc acaatttatt tctacacaga aagtttttaa aatgaatttt 2050
 accgtaacta taaaaggga cctataaatg tagtttcatc tgtcgtcaat 2100
 tactgcagaa aattatgtgt atccacaacc tagttatttt aaaaattatg 2150
 ttgactaaat acaaagtttg ttttctaaaa tgtaaataat tgccacaatg 2200
 taaagcaaat cttagctata ttttaaata taaataacat gttcaagata 2250
 cttacaatt tatttaaaat ctaagattgc tctaacgtct agtgaaaaaa 2300
 atatttttta aatttcagcc aaataatgca ttttatttta taaaataca 2350
 gacagaaaat tagggagaaa cttctagttt tgccaataga aaatgttctt 2400

ccattgaata aaagttattt caaattgaat ttgtgccttt cacacgtaat 2450
gattaaatct gaattcttaa taatatatcc tatgctgatt ttcccaaaac 2500
atgaccata gtattaaata catatcattt ttaaaaataa aaaaaaaccc 2550
aaaaataatg catgcataat ttaaatggc aatttataaa gacaaatcta 2600
tgaatgaatt tttcagtgtt atcttcatat gatatgctga acaccaaatt 2650
ctccagaaat gcattttatg tagttctaaa atcagcaaaa tattgggtatt 2700
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aaaaacccaa cccatctgca attcaaata gaaagtttgg acagctttac 2850
aagtattagt gcatgctcag aacaggtggg actaaaacaa actcaaggaa 2900
ctgttggttg ttttcccgat actgagaatt caacagctcc agagcagaag 2950
ccacaggggc atagcttagt ccaaactgct aatttcattt tacagtgtat 3000
gtaacgctta gtctcacagt gtctttaact catctttgca atcaacaact 3050
ttactagtga ctttctggaa caatttcctt tcaggaatac atattcactg 3100
cttagagggtg accttgccct aatatatttg tgaagttaaa attttaaaga 3150
tagctcatga aacttttgct taagcaaaaa gaaaacctcg aattgaaatg 3200
tgtgaggcaa actatgcatg ggaatagctt aatgtgaaga taatcatttg 3250
gacaactcaa atccatcaac atgaccaatg tttttcatct gccacatctc 3300
aaaataaaac ttctggtgaa acaaattaaa caaatatcc aaacctcaaa 3350
aaaaa 3355

<210> 278
<211> 491
<212> PRT
<213> Homo Sapien

<400> 278
Met Lys Thr Phe Thr Trp Thr Leu Gly Val Leu Phe Phe Leu Leu
1 5 10 15
Val Asp Thr Gly His Cys Arg Gly Gly Gln Phe Lys Ile Lys Lys
20 25 30
Ile Asn Gln Arg Arg Tyr Pro Arg Ala Thr Asp Gly Lys Glu Glu
35 40 45
Ala Lys Lys Cys Ala Tyr Thr Phe Leu Val Pro Glu Gln Arg Ile
50 55 60

Thr	Gly	Pro	Ile	Cys	Val	Asn	Thr	Lys	Gly	Gln	Asp	Ala	Ser	Thr	
				65					70					75	
Ile	Lys	Asp	Met	Ile	Thr	Arg	Met	Asp	Leu	Glu	Asn	Leu	Lys	Asp	
				80					85					90	
Val	Leu	Ser	Arg	Gln	Lys	Arg	Glu	Ile	Asp	Val	Leu	Gln	Leu	Val	
				95					100					105	
Val	Asp	Val	Asp	Gly	Asn	Ile	Val	Asn	Glu	Val	Lys	Leu	Leu	Arg	
				110					115					120	
Lys	Glu	Ser	Arg	Asn	Met	Asn	Ser	Arg	Val	Thr	Gln	Leu	Tyr	Met	
				125					130					135	
Gln	Leu	Leu	His	Glu	Ile	Ile	Arg	Lys	Arg	Asp	Asn	Ser	Leu	Glu	
				140					145					150	
Leu	Ser	Gln	Leu	Glu	Asn	Lys	Ile	Leu	Asn	Val	Thr	Thr	Glu	Met	
				155					160					165	
Leu	Lys	Met	Ala	Thr	Arg	Tyr	Arg	Glu	Leu	Glu	Val	Lys	Tyr	Ala	
				170					175					180	
Ser	Leu	Thr	Asp	Leu	Val	Asn	Asn	Gln	Ser	Val	Met	Ile	Thr	Leu	
				185					190					195	
Leu	Glu	Glu	Gln	Cys	Leu	Arg	Ile	Phe	Ser	Arg	Gln	Asp	Thr	His	
				200					205					210	
Val	Ser	Pro	Pro	Leu	Val	Gln	Val	Val	Pro	Gln	His	Ile	Pro	Asn	
				215					220					225	
Ser	Gln	Gln	Tyr	Thr	Pro	Gly	Leu	Leu	Gly	Gly	Asn	Glu	Ile	Gln	
				230					235					240	
Arg	Asp	Pro	Gly	Tyr	Pro	Arg	Asp	Leu	Met	Pro	Pro	Pro	Asp	Leu	
				245					250					255	
Ala	Thr	Ser	Pro	Thr	Lys	Ser	Pro	Phe	Lys	Ile	Pro	Pro	Val	Thr	
				260					265					270	
Phe	Ile	Asn	Glu	Gly	Pro	Phe	Lys	Asp	Cys	Gln	Gln	Ala	Lys	Glu	
				275					280					285	
Ala	Gly	His	Ser	Val	Ser	Gly	Ile	Tyr	Met	Ile	Lys	Pro	Glu	Asn	
				290					295					300	
Ser	Asn	Gly	Pro	Met	Gln	Leu	Trp	Cys	Glu	Asn	Ser	Leu	Asp	Pro	
				305					310					315	
Gly	Gly	Trp	Thr	Val	Ile	Gln	Lys	Arg	Thr	Asp	Gly	Ser	Val	Asn	
				320					325					330	
Phe	Phe	Arg	Asn	Trp	Glu	Asn	Tyr	Lys	Lys	Gly	Phe	Gly	Asn	Ile	
				335					340					345	
Asp	Gly	Glu	Tyr	Trp	Leu	Gly	Leu	Glu	Asn	Ile	Tyr	Met	Leu	Ser	

Asn	Gln	Asp	Asn	Tyr	Lys	Leu	Leu	Ile	Glu	Leu	Glu	Asp	Trp	Ser	350	355	360
				365					370					375			
Asp	Lys	Lys	Val	Tyr	Ala	Glu	Tyr	Ser	Ser	Phe	Arg	Leu	Glu	Pro			
				380					385					390			
Glu	Ser	Glu	Phe	Tyr	Arg	Leu	Arg	Leu	Gly	Thr	Tyr	Gln	Gly	Asn			
				395					400					405			
Ala	Gly	Asp	Ser	Met	Met	Trp	His	Asn	Gly	Lys	Gln	Phe	Thr	Thr			
				410					415					420			
Leu	Asp	Arg	Asp	Lys	Asp	Met	Tyr	Ala	Gly	Asn	Cys	Ala	His	Phe			
				425					430					435			
His	Lys	Gly	Gly	Trp	Trp	Tyr	Asn	Ala	Cys	Ala	His	Ser	Asn	Leu			
				440					445					450			
Asn	Gly	Val	Trp	Tyr	Arg	Gly	Gly	His	Tyr	Arg	Ser	Lys	His	Gln			
				455					460					465			
Asp	Gly	Ile	Phe	Trp	Ala	Glu	Tyr	Arg	Gly	Gly	Ser	Tyr	Ser	Leu			
				470					475					480			
Arg	Ala	Val	Gln	Met	Met	Ile	Lys	Pro	Ile	Asp							
				485					490								

<210> 279
 <211> 1231
 <212> DNA
 <213> Homo Sapien

<400> 279
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 cagcccgcgc gggagccgga ccgccgccgg aggagctcgg acggcatgct 150
 gagccccctc ctttgctgaa gcccgagtgc ggagaagccc gggcaaacgc 200
 aggctaagga gaccaaagcg gcgaagtcgc gagacagcgg acaagcagcg 250
 gaggagaagg aggaggaggc gaaccacagag aggggcagca aaagaagcgg 300
 tgggtggtggg cgtcgtggcc atggcggcgg ctatcgccag ctgctcatc 350
 cgtcagaaga ggcaagcccg cgagcgcgag aaatccaacg cctgcaagtg 400
 tgtcagcagc cccagcaaag gcaagaccag ctgcgacaaa aacaagttaa 450
 atgtcttttc ccgggtcaaa ctcttcggct ccaagaagag gcgcagaaga 500
 agaccagagc ctcagcttaa gggatatagt accaagctat acagccgaca 550
 aggctaccac ttgcagctgc aggcggatgg aaccattgat ggcaccaaag 600

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atgaggacag cacttacact ctgtttaacc tcatccctgt gggctctgcga 650
gtgggtggcta tccaaggagt tcaaaccaag ctgtacttgg caatgaacag 700
tgagggatac ttgtacacct cggaactttt cacacctgag tgcaaattca 750
aagaatcagt gtttgaaaat tattatgtga catattcatc aatgatatac 800
cgtcagcagc agtcaggccg aggggtggtat ctgggtctga acaaagaagg 850
agagatcatg aaaggcaacc atgtgaagaa gaacaagcct gcagctcatt 900
ttctgcctaa accactgaaa gtggccatgt acaaggagcc atcactgcac 950
gatctcacgg agttctcccg atctggaagc gggaccccaa ccaagagcag 1000
aagtgtctct ggcgtgctga acggaggcaa atccatgagc cacaatgaat 1050
caacgtagcc agtgagggca aaagaagggc tctgtaacag aaccttacct 1100
ccaggtgctg ttgaattctt ctagcagtcc ttcacccaaa agttcaaatt 1150
tgtcagtgcg atttaccaa caaacaggca gagttcacta ttctatctgc 1200
cattagacct tcttatcatc cataactaaag c 1231

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<210> 280
<211> 245
<212> PRT
<213> Homo Sapien

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<400> 280
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  1                      5              10              15
Ala Arg Glu Arg Glu Lys Ser Asn Ala Cys Lys Cys Val Ser Ser
                20              25              30
Pro Ser Lys Gly Lys Thr Ser Cys Asp Lys Asn Lys Leu Asn Val
                35              40              45
Phe Ser Arg Val Lys Leu Phe Gly Ser Lys Lys Arg Arg Arg Arg
                50              55              60
Arg Pro Glu Pro Gln Leu Lys Gly Ile Val Thr Lys Leu Tyr Ser
                65              70              75
Arg Gln Gly Tyr His Leu Gln Leu Gln Ala Asp Gly Thr Ile Asp
                80              85              90
Gly Thr Lys Asp Glu Asp Ser Thr Tyr Thr Leu Phe Asn Leu Ile
                95              100             105
Pro Val Gly Leu Arg Val Val Ala Ile Gln Gly Val Gln Thr Lys
                110             115             120
Leu Tyr Leu Ala Met Asn Ser Glu Gly Tyr Leu Tyr Thr Ser Glu
                125             130             135

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Leu	Phe	Thr	Pro	Glu	Cys	Lys	Phe	Lys	Glu	Ser	Val	Phe	Glu	Asn	
				140					145					150	
Tyr	Tyr	Val	Thr	Tyr	Ser	Ser	Met	Ile	Tyr	Arg	Gln	Gln	Gln	Ser	
				155					160					165	
Gly	Arg	Gly	Trp	Tyr	Leu	Gly	Leu	Asn	Lys	Glu	Gly	Glu	Ile	Met	
				170					175					180	
Lys	Gly	Asn	His	Val	Lys	Lys	Asn	Lys	Pro	Ala	Ala	His	Phe	Leu	
				185					190					195	
Pro	Lys	Pro	Leu	Lys	Val	Ala	Met	Tyr	Lys	Glu	Pro	Ser	Leu	His	
				200					205					210	
Asp	Leu	Thr	Glu	Phe	Ser	Arg	Ser	Gly	Ser	Gly	Thr	Pro	Thr	Lys	
				215					220					225	
Ser	Arg	Ser	Val	Ser	Gly	Val	Leu	Asn	Gly	Gly	Lys	Ser	Met	Ser	
				230					235					240	
His	Asn	Glu	Ser	Thr											
				245											

<210> 281

<211> 1471

<212> DNA

<213> Homo Sapien

<400> 281

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gagccctgtc ttactgaacc tgggcaacct ggatattctg agacatatatt 150
tgggggggatt tcagtgaaaa aagtggggga tcccctccat ttagagtgta 200
gcaaaggaaa aaacaccaag gttgggttcc ttctgacat tggcagtgcc 250
ccagtagggg tgggatgagc gaatattccc aaagctaaag tcccacaccc 300
tgtagattac aagagtggat ttggcaggag tgtgccccaa aatacagtgg 350
aaaggtgcct gaagatatatt aaaccacgtc ttggaaattt agtgggtctt 400
ggctttggga taggtgaagt gaggacagac actggagagg agggaaaggg 450
gacgttttca ataggaggca aaactcgagg gtgggatcca ctgaggagta 500
cataggctgc tggatctggt ggagccagca ctgggcccac gggtggtaac 550
tggctgctgt ggaggggggt acgtgagggg ggggtctggg gcttatactc 600
aggtcctgtg ggtggggcag cgagtcgggg cctgagcgtc aagagcatgc 650
cctagtgagc gggctcctct gggggagccc agcgcgctcc gggcgctgc 700

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cggtttgggg gtgtctcctc ccggggcgct atggcggcgc tggccagtag 750
 cctgatccgg cagaagcggg aggtccgcga gcccgggggc agccggccgg 800
 tgtcggcgca gcggcgctg tgtccccgcg gcaccaagtc cctttgccag 850
 aagcagctcc tcctcctgct gtccaagggt cgactgtgcg gggggcggcc 900
 cgcgcggccg gaccgcggcc cggagcctca gctcaaaggc atcgtcacca 950
 aactgttctg ccgccagggt ttctacctcc aggcgaatcc cgacggaagc 1000
 atccagggca cccagagga taccagctcc ttcacccact tcaacctgat 1050
 ccctgtgggc ctccgtgtgg tcaccatcca gagcgccaag ctgggtcact 1100
 acatggccat gaatgctgag ggactgctct acagttcgcc gcatttcaca 1150
 gctgagtgtc gctttaagga gtgtgtcttt gagaattact acgtcctgta 1200
 cgctctgct ctctaccgcc agcgtcgttc tggccggggc tggtagctcg 1250
 gcctggacaa ggagggccag gtcataagg gaaaccgagt taagaagacc 1300
 aaggcagctg cccactttct gcccaagctc ctggagggtg ccatgtacca 1350
 ggagccttct ctccacagtg tccccgaggg ccccccttcc agtccccctg 1400
 cccccgaaa ttagtccct ggactggagg ttccctgcac tcccagtgag 1450
 ccagccacca ccacaacctg t 1471

<210> 282

<211> 225

<212> PRT

<213> Homo Sapien

<400> 282

Met	Ala	Ala	Leu	Ala	Ser	Ser	Leu	Ile	Arg	Gln	Lys	Arg	Glu	Val
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Arg	Glu	Pro	Gly	Gly	Ser	Arg	Pro	Val	Ser	Ala	Gln	Arg	Arg	Val
			20						25					30
Cys	Pro	Arg	Gly	Thr	Lys	Ser	Leu	Cys	Gln	Lys	Gln	Leu	Leu	Ile
			35						40					45
Leu	Leu	Ser	Lys	Val	Arg	Leu	Cys	Gly	Gly	Arg	Pro	Ala	Arg	Pro
			50						55					60
Asp	Arg	Gly	Pro	Glu	Pro	Gln	Leu	Lys	Gly	Ile	Val	Thr	Lys	Leu
			65						70					75
Phe	Cys	Arg	Gln	Gly	Phe	Tyr	Leu	Gln	Ala	Asn	Pro	Asp	Gly	Ser
			80						85					90
Ile	Gln	Gly	Thr	Pro	Glu	Asp	Thr	Ser	Ser	Phe	Thr	His	Phe	Asn
			95						100					105

Leu	Ile	Pro	Val	Gly	Leu	Arg	Val	Val	Thr	Ile	Gln	Ser	Ala	Lys
				110					115					120
Leu	Gly	His	Tyr	Met	Ala	Met	Asn	Ala	Glu	Gly	Leu	Leu	Tyr	Ser
				125					130					135
Ser	Pro	His	Phe	Thr	Ala	Glu	Cys	Arg	Phe	Lys	Glu	Cys	Val	Phe
				140					145					150
Glu	Asn	Tyr	Tyr	Val	Leu	Tyr	Ala	Ser	Ala	Leu	Tyr	Arg	Gln	Arg
				155					160					165
Arg	Ser	Gly	Arg	Ala	Trp	Tyr	Leu	Gly	Leu	Asp	Lys	Glu	Gly	Gln
				170					175					180
Val	Met	Lys	Gly	Asn	Arg	Val	Lys	Lys	Thr	Lys	Ala	Ala	Ala	His
				185					190					195
Phe	Leu	Pro	Lys	Leu	Leu	Glu	Val	Ala	Met	Tyr	Gln	Glu	Pro	Ser
				200					205					210
Leu	His	Ser	Val	Pro	Glu	Ala	Ser	Pro	Ser	Ser	Pro	Pro	Ala	Pro
				215					220					225

<210> 283

<211> 744

<212> DNA

<213> Homo Sapien

<400> 283

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gcaagaaccg cgggctctgc aacggcaacc tgggtggatat cttctccaaa 150
gtgcgcacat tcggcctcaa gaagcgcagg ttgcggcgcc aagatcccca 200
gctcaagggt atagtaccca gggttatattg caggcaaggc tactacttgc 250
aaatgcaccc cgatggagct ctcgatggaa ccaaggatga cagcactaat 300
tctacactct tcaacctcat accagtggga ctacgtgttg ttgccatcca 350
gggagtgaac acagggttgt atatagccat gaatggagaa gggtacctct 400
acccatcaga actttttacc cctgaatgca agtttaaaga atctgttttt 450
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ggaacagagt aaagaaaacc aaaccagcag ctcatcttct acccaagcca 600
ttggaagttg ccatgtaccg agaaccatct ttgcatgatg ttggggaaac 650
ggtcccgaag cctgggggtga cgccaagtaa aagcacaagt gcgtctgcaa 700

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taatgaatgg aggcaaacca gtcaacaaga gtaagacaac atag 744

<210> 284

<211> 247

<212> PRT

<213> Homo Sapien

<400> 284

Met	Ala	Ala	Ala	Ile	Ala	Ser	Gly	Leu	Ile	Arg	Gln	Lys	Arg	Gln
1				5					10					15

Ala	Arg	Glu	Gln	His	Trp	Asp	Arg	Pro	Ser	Ala	Ser	Arg	Arg	Arg
				20					25					30

Ser	Ser	Pro	Ser	Lys	Asn	Arg	Gly	Leu	Cys	Asn	Gly	Asn	Leu	Val
				35					40					45

Asp	Ile	Phe	Ser	Lys	Val	Arg	Ile	Phe	Gly	Leu	Lys	Lys	Arg	Arg
				50					55					60

Leu	Arg	Arg	Gln	Asp	Pro	Gln	Leu	Lys	Gly	Ile	Val	Thr	Arg	Leu
				65					70					75

Tyr	Cys	Arg	Gln	Gly	Tyr	Tyr	Leu	Gln	Met	His	Pro	Asp	Gly	Ala
				80					85					90

Leu	Asp	Gly	Thr	Lys	Asp	Asp	Ser	Thr	Asn	Ser	Thr	Leu	Phe	Asn
				95					100					105

Leu	Ile	Pro	Val	Gly	Leu	Arg	Val	Val	Ala	Ile	Gln	Gly	Val	Lys
				110					115					120

Thr	Gly	Leu	Tyr	Ile	Ala	Met	Asn	Gly	Glu	Gly	Tyr	Leu	Tyr	Pro
				125					130					135

Ser	Glu	Leu	Phe	Thr	Pro	Glu	Cys	Lys	Phe	Lys	Glu	Ser	Val	Phe
				140					145					150

Glu	Asn	Tyr	Tyr	Val	Ile	Tyr	Ser	Ser	Met	Leu	Tyr	Arg	Gln	Gln
				155					160					165

Glu	Ser	Gly	Arg	Ala	Trp	Phe	Leu	Gly	Leu	Asn	Lys	Glu	Gly	Gln
				170					175					180

Ala	Met	Lys	Gly	Asn	Arg	Val	Lys	Lys	Thr	Lys	Pro	Ala	Ala	His
				185					190					195

Phe	Leu	Pro	Lys	Pro	Leu	Glu	Val	Ala	Met	Tyr	Arg	Glu	Pro	Ser
				200					205					210

Leu	His	Asp	Val	Gly	Glu	Thr	Val	Pro	Lys	Pro	Gly	Val	Thr	Pro
				215					220					225

Ser	Lys	Ser	Thr	Ser	Ala	Ser	Ala	Ile	Met	Asn	Gly	Gly	Lys	Pro
				230					235					240

Val	Asn	Lys	Ser	Lys	Thr	Thr								
				245										

<210> 285
<211> 2849
<212> DNA
<213> Homo Sapien

<220>
<221> unsure
<222> 2715
<223> unknown base

<400> 285
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aagaggggctc taggaaaaag ttttggatgg gattatgtgg aaactaccct 150
gcgattctct gctgccagag caggctcggc gcttccaccc cagtgcagcc 200
ttcccctggc ggtggtgaaa gagactcggg agtcgctgct tccaaagtgc 250
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ttctcctgct gacatctgcc ctggccggcc agagacaggg gactcaggcg 350
gaatccaacc tgagtagtaa attccagttt tccagcaaca aggaacagaa 400
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gaagtattca cagcccaagg tttcctcata cttatccaag aaatacggtc 500
ttggtatgga gattagtagc agtagaggaa aatgtatgga tacaacttac 550
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atgattttgt agaagttgag gaaccacagt atggaactat attagggcgc 650
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aattaggata agatttgtat ctgatgaata ttttccttct gaaccagggt 750
tctgcatcca ctacaacatt gtcatgccac aattcacaga agctgtgagt 800
ccttcagtgc taccctcttc agctttgcca ctggacctgc ttaataatgc 850
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caattgcaat gaatgtcaat gtgtcccaag caaagttact aaaaaatacc 1200

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gatacggcct agggtaatgt cagtacagga aaaaaactgt gcaagtgagc 1700
acctgattcc gttgccttgc ttaactctaa agctccatgt cctgggccta 1750
aaatcgtata aaatctggat tttttttttt ttttttgctc atattcacat 1800
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<210> 286
 <211> 345
 <212> PRT
 <213> Homo Sapien

<400> 286
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 35 40 45
 His Glu Arg Ile Ile Thr Val Ser Thr Asn Gly Ser Ile His Ser
 50 55 60
 Pro Arg Phe Pro His Thr Tyr Pro Arg Asn Thr Val Leu Val Trp
 65 70 75
 Arg Leu Val Ala Val Glu Glu Asn Val Trp Ile Gln Leu Thr Phe
 80 85 90
 Asp Glu Arg Phe Gly Leu Glu Asp Pro Glu Asp Asp Ile Cys Lys
 95 100 105
 Tyr Asp Phe Val Glu Val Glu Glu Pro Ser Asp Gly Thr Ile Leu
 110 115 120
 Gly Arg Trp Cys Gly Ser Gly Thr Val Pro Gly Lys Gln Ile Ser
 125 130 135
 Lys Gly Asn Gln Ile Arg Ile Arg Phe Val Ser Asp Glu Tyr Phe
 140 145 150
 Pro Ser Glu Pro Gly Phe Cys Ile His Tyr Asn Ile Val Met Pro
 155 160 165
 Gln Phe Thr Glu Ala Val Ser Pro Ser Val Leu Pro Pro Ser Ala
 170 175 180
 Leu Pro Leu Asp Leu Leu Asn Asn Ala Ile Thr Ala Phe Ser Thr
 185 190 195
 Leu Glu Asp Leu Ile Arg Tyr Leu Glu Pro Glu Arg Trp Gln Leu
 200 205 210
 Asp Leu Glu Asp Leu Tyr Arg Pro Thr Trp Gln Leu Leu Gly Lys
 215 220 225

Ala	Phe	Val	Phe	Gly	Arg	Lys	Ser	Arg	Val	Val	Asp	Leu	Asn	Leu
				230					235					240
Leu	Thr	Glu	Glu	Val	Arg	Leu	Tyr	Ser	Cys	Thr	Pro	Arg	Asn	Phe
				245					250					255
Ser	Val	Ser	Ile	Arg	Glu	Glu	Leu	Lys	Arg	Thr	Asp	Thr	Ile	Phe
				260					265					270
Trp	Pro	Gly	Cys	Leu	Leu	Val	Lys	Arg	Cys	Gly	Gly	Asn	Cys	Ala
				275					280					285
Cys	Cys	Leu	His	Asn	Cys	Asn	Glu	Cys	Gln	Cys	Val	Pro	Ser	Lys
				290					295					300
Val	Thr	Lys	Lys	Tyr	His	Glu	Val	Leu	Gln	Leu	Arg	Pro	Lys	Thr
				305					310					315
Gly	Val	Arg	Gly	Leu	His	Lys	Ser	Leu	Thr	Asp	Val	Ala	Leu	Glu
				320					325					330
His	His	Glu	Glu	Cys	Asp	Cys	Val	Cys	Arg	Gly	Ser	Thr	Gly	Gly
				335					340					345

<210> 287
 <211> 1496
 <212> DNA
 <213> Homo Sapien

<400> 287
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 ctgggcccct ctcttgggtc tgtgctgcag tctggccgct gctgatcgcc 150
 acaccgtctt ctggaacagt tcaaattcca agttccggaa tgaggactac 200
 accatacatg tgcagctgaa tgactacgtg gacatcatct gtccgcacta 250
 tgaagatcac tctgtggcag acgctgccat ggagcagtac atactgtacc 300
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 gtctgagaag ttccagcgct tcacaccttt caccctgggc aaggagttca 450
 aagaaggaca cagctactac tacatctcca aacccatcca ccagcatgaa 500
 gaccgctgct tgagggttgaa ggtgactgtc agtggcaaaa tcaactcacag 550
 tcttcaggcc catgacaatc cacaggagaa gagacttgca gcagatgacc 600
 cagaggtgcy ggttctacat agcatcggtc acagtgtgtc cccacgcctc 650
 ttcccacttg cctggactgt gctgtctcct ccacttctgc tgctgcaaac 700

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aaacgggtca atattaaggt tttcaaccgg aaggaggcca accagcccga 900
cagtgccatc cccaccttca cctcggaggg atggagaaag aagtggagac 950
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cagatgaact gactgaagga aaagcaagaa acagtttctt gcttggaagc 1150
caggtacagg agaggcagca tgcttgggct gaccagcat ctcccagcaa 1200
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cattctgcct agagtgtagc ctaaagggca gggcccacgt gtatagtatc 1400
tgtatataag ttgctgtgtg tctgtcctga tttctacaac tggagttttt 1450
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<210> 288

<211> 204

<212> PRT

<213> Homo Sapien

<400> 288

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Met Glu Phe Leu Trp Ala Pro Leu Leu Gly Leu Cys Cys Ser Leu
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Ala Ala Ala Asp Arg His Thr Val Phe Trp Asn Ser Ser Asn Pro
  20              25              30
Lys Phe Arg Asn Glu Asp Tyr Thr Ile His Val Gln Leu Asn Asp
  35              40              45
Tyr Val Asp Ile Ile Cys Pro His Tyr Glu Asp His Ser Ala Asp
  50              55              60
Ala Ala Met Glu Gln Tyr Ile Leu Tyr Leu Val Glu His Glu Glu
  65              70              75
Tyr Gln Leu Cys Gln Pro Gln Ser Lys Asp Gln Val Arg Trp Gln
  80              85              90
Cys Asn Arg Pro Ser Ala Lys His Gly Pro Glu Lys Leu Ser Glu
  95              100             105

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Lys	Phe	Gln	Arg	Phe	Thr	Pro	Phe	Thr	Leu	Gly	Lys	Glu	Phe	Lys
				110					115					120
Glu	Gly	His	Ser	Tyr	Tyr	Tyr	Ile	Ser	Lys	Pro	Ile	His	Gln	His
				125					130					135
Glu	Asp	Arg	Cys	Leu	Arg	Leu	Lys	Val	Thr	Val	Ser	Gly	Lys	Ile
				140					145					150
Thr	His	Ser	Pro	Gln	Ala	His	Asp	Asn	Pro	Gln	Glu	Lys	Arg	Leu
				155					160					165
Ala	Ala	Asp	Asp	Pro	Glu	Val	Arg	Val	Leu	His	Ser	Ile	Gly	His
				170					175					180
Ser	Ala	Ala	Pro	Arg	Leu	Phe	Pro	Leu	Ala	Trp	Thr	Val	Leu	Leu
				185					190					195
Leu	Pro	Leu	Leu	Leu	Leu	Gln	Thr	Pro						
				200										

<210> 289
 <211> 1838
 <212> DNA
 <213> Homo Sapien

<400> 289
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 agatggcccc atggcccccg aagggcctag tcccagctgt gctctggggc 150
 ctcagcctct tctcaacct cccaggacct atctggctcc agccctctcc 200
 acctccccag tcttctcccc cgcctcagcc ccatccgtgt catacctgcc 250
 ggggactggg tgacagcttt aacaagggcc tggagagAAC catccgggac 300
 aactttggag gtggaaacac tgccctgggag gaagagaatt tgtccaaata 350
 caaagacagt gagacccgcc tggtagaggt gctggagggt gtgtgcagca 400
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 ccaagccggc tacgggggtg aggcctgtgg ccagtgtggc cttggctact 700
 ttgaggcaga acgcaacgcc agccatctgg tatgttcggc ttgttttggc 750
 ccctgtgccc gatgctcagg acctgaggaa tcaaactgtt tgcaatgcaa 800

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 ggctcctatg agtgccgaga ctgtgccaaag gcctgcctag gctgcatggg 950
 ggcagggcca ggtcgctgta agaagtgtag ccctggctat cagcaggtgg 1000
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 gctccctcct gccagctgca tgctgccagt tcctgttctg tgttcaccac 1750
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<210> 290

<211> 420

<212> PRT

<213> Homo Sapien

<400> 290

Met	Ala	Pro	Trp	Pro	Pro	Lys	Gly	Leu	Val	Pro	Ala	Val	Leu	Trp
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Gly	Leu	Ser	Leu	Phe	Leu	Asn	Leu	Pro	Gly	Pro	Ile	Trp	Leu	Gln
			20					25					30	

Pro	Ser	Pro	Pro	Pro	Gln	Ser	Ser	Pro	Pro	Pro	Gln	Pro	His	Pro
				35				40					45	

Cys	His	Thr	Cys	Arg	Gly	Leu	Val	Asp	Ser	Phe	Asn	Lys	Gly	Leu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

				50					55					60	
Glu	Arg	Thr	Ile	Arg	Asp	Asn	Phe	Gly	Gly	Gly	Asn	Thr	Ala	Trp	
				65					70					75	
Glu	Glu	Glu	Asn	Leu	Ser	Lys	Tyr	Lys	Asp	Ser	Glu	Thr	Arg	Leu	
				80					85					90	
Val	Glu	Val	Leu	Glu	Gly	Val	Cys	Ser	Lys	Ser	Asp	Phe	Glu	Cys	
				95					100					105	
His	Arg	Leu	Leu	Glu	Leu	Ser	Glu	Glu	Leu	Val	Glu	Ser	Trp	Trp	
				110					115					120	
Phe	His	Lys	Gln	Gln	Glu	Ala	Pro	Asp	Leu	Phe	Gln	Trp	Leu	Cys	
				125					130					135	
Ser	Asp	Ser	Leu	Lys	Leu	Cys	Cys	Pro	Ala	Gly	Thr	Phe	Gly	Pro	
				140					145					150	
Ser	Cys	Leu	Pro	Cys	Pro	Gly	Gly	Thr	Glu	Arg	Pro	Cys	Gly	Gly	
				155					160					165	
Tyr	Gly	Gln	Cys	Glu	Gly	Glu	Gly	Thr	Arg	Gly	Gly	Ser	Gly	His	
				170					175					180	
Cys	Asp	Cys	Gln	Ala	Gly	Tyr	Gly	Gly	Glu	Ala	Cys	Gly	Gln	Cys	
				185					190					195	
Gly	Leu	Gly	Tyr	Phe	Glu	Ala	Glu	Arg	Asn	Ala	Ser	His	Leu	Val	
				200					205					210	
Cys	Ser	Ala	Cys	Phe	Gly	Pro	Cys	Ala	Arg	Cys	Ser	Gly	Pro	Glu	
				215					220					225	
Glu	Ser	Asn	Cys	Leu	Gln	Cys	Lys	Lys	Gly	Trp	Ala	Leu	His	His	
				230					235					240	
Leu	Lys	Cys	Val	Asp	Ile	Asp	Glu	Cys	Gly	Thr	Glu	Gly	Ala	Asn	
				245					250					255	
Cys	Gly	Ala	Asp	Gln	Phe	Cys	Val	Asn	Thr	Glu	Gly	Ser	Tyr	Glu	
				260					265					270	
Cys	Arg	Asp	Cys	Ala	Lys	Ala	Cys	Leu	Gly	Cys	Met	Gly	Ala	Gly	
				275					280					285	
Pro	Gly	Arg	Cys	Lys	Lys	Cys	Ser	Pro	Gly	Tyr	Gln	Gln	Val	Gly	
				290					295					300	
Ser	Lys	Cys	Leu	Asp	Val	Asp	Glu	Cys	Glu	Thr	Glu	Val	Cys	Pro	
				305					310					315	
Gly	Glu	Asn	Lys	Gln	Cys	Glu	Asn	Thr	Glu	Gly	Gly	Tyr	Arg	Cys	
				320					325					330	
Ile	Cys	Ala	Glu	Gly	Tyr	Lys	Gln	Met	Glu	Gly	Ile	Cys	Val	Lys	
				335					340					345	

Glu	Gln	Ile	Pro	Glu	Ser	Ala	Gly	Phe	Phe	Ser	Glu	Met	Thr	Glu
				350					355					360
Asp	Glu	Leu	Val	Val	Leu	Gln	Gln	Met	Phe	Phe	Gly	Ile	Ile	Ile
				365					370					375
Cys	Ala	Leu	Ala	Thr	Leu	Ala	Ala	Lys	Gly	Asp	Leu	Val	Phe	Thr
				380					385					390
Ala	Ile	Phe	Ile	Gly	Ala	Val	Ala	Ala	Met	Thr	Gly	Tyr	Trp	Leu
				395					400					405
Ser	Glu	Arg	Ser	Asp	Arg	Val	Leu	Glu	Gly	Phe	Ile	Lys	Gly	Arg
				410					415					420

<210> 291
 <211> 2447
 <212> DNA
 <213> Homo Sapien

<400> 291
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 gggctcctcc ctgccgcctc ctctcagtgg atggttccag gcaccctgtc 200
 tggggcaggg agggcacagg cctgcacatc gaagggtgggg tgggaccagg 250
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 gaggtccgc ttgactaaga gtagcttgaa ggaggcacca tgcaggagct 400
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ccaaaaaaaaa aaaaaaaaaa gggcggccgc gactctagag tcgacct 2447

<210> 292

<211> 428

<212> PRT

<213> Homo Sapien

<400> 292

Met	Gln	Glu	Leu	His	Leu	Leu	Trp	Trp	Ala	Leu	Leu	Leu	Gly	Leu	
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Ala	Gln	Ala	Cys	Pro	Glu	Pro	Cys	Asp	Cys	Gly	Glu	Lys	Tyr	Gly	
				20					25					30	
Phe	Gln	Ile	Ala	Asp	Cys	Ala	Tyr	Arg	Asp	Leu	Glu	Ser	Val	Pro	
				35					40					45	
Pro	Gly	Phe	Pro	Ala	Asn	Val	Thr	Thr	Leu	Ser	Leu	Ser	Ala	Asn	
				50					55					60	
Arg	Leu	Pro	Gly	Leu	Pro	Glu	Gly	Ala	Phe	Arg	Glu	Val	Pro	Leu	
				65					70					75	
Leu	Gln	Ser	Leu	Trp	Leu	Ala	His	Asn	Glu	Ile	Arg	Thr	Val	Ala	
				80					85					90	
Ala	Gly	Ala	Leu	Ala	Ser	Leu	Ser	His	Leu	Lys	Ser	Leu	Asp	Leu	
				95					100					105	
Ser	His	Asn	Leu	Ile	Ser	Asp	Phe	Ala	Trp	Ser	Asp	Leu	His	Asn	
				110					115					120	
Leu	Ser	Ala	Leu	Gln	Leu	Leu	Lys	Met	Asp	Ser	Asn	Glu	Leu	Thr	
				125					130					135	
Phe	Ile	Pro	Arg	Asp	Ala	Phe	Arg	Ser	Leu	Arg	Ala	Leu	Arg	Ser	
				140					145					150	
Leu	Gln	Leu	Asn	His	Asn	Arg	Leu	His	Thr	Leu	Ala	Glu	Gly	Thr	
				155					160					165	
Phe	Thr	Pro	Leu	Thr	Ala	Leu	Ser	His	Leu	Gln	Ile	Asn	Glu	Asn	
				170					175					180	
Pro	Phe	Asp	Cys	Thr	Cys	Gly	Ile	Val	Trp	Leu	Lys	Thr	Trp	Ala	
				185					190					195	
Leu	Thr	Thr	Ala	Val	Ser	Ile	Pro	Glu	Gln	Asp	Asn	Ile	Ala	Cys	
				200					205					210	
Thr	Ser	Pro	His	Val	Leu	Lys	Gly	Thr	Pro	Leu	Ser	Arg	Leu	Pro	
				215					220					225	
Pro	Leu	Pro	Cys	Ser	Ala	Pro	Ser	Val	Gln	Leu	Ser	Tyr	Gln	Pro	
				230					235					240	
Ser	Gln	Asp	Gly	Ala	Glu	Leu	Arg	Pro	Gly	Phe	Val	Leu	Ala	Leu	
				245					250					255	

His	Cys	Asp	Val	Asp	Gly	Gln	Pro	Ala	Pro	Gln	Leu	His	Trp	His	260	265	270
Ile	Gln	Ile	Pro	Ser	Gly	Ile	Val	Glu	Ile	Thr	Ser	Pro	Asn	Val	275	280	285
Gly	Thr	Asp	Gly	Arg	Ala	Leu	Pro	Gly	Thr	Pro	Val	Ala	Ser	Ser	290	295	300
Gln	Pro	Arg	Phe	Gln	Ala	Phe	Ala	Asn	Gly	Ser	Leu	Leu	Ile	Pro	305	310	315
Asp	Phe	Gly	Lys	Leu	Glu	Glu	Gly	Thr	Tyr	Ser	Cys	Leu	Ala	Thr	320	325	330
Asn	Glu	Leu	Gly	Ser	Ala	Glu	Ser	Ser	Val	Asp	Val	Ala	Leu	Ala	335	340	345
Thr	Pro	Gly	Glu	Gly	Gly	Glu	Asp	Thr	Leu	Gly	Arg	Arg	Phe	His	350	355	360
Gly	Lys	Ala	Val	Glu	Gly	Lys	Gly	Cys	Tyr	Thr	Val	Asp	Asn	Glu	365	370	375
Val	Gln	Pro	Ser	Gly	Pro	Glu	Asp	Asn	Val	Val	Ile	Ile	Tyr	Leu	380	385	390
Ser	Arg	Ala	Gly	Asn	Pro	Glu	Ala	Ala	Val	Ala	Glu	Gly	Val	Pro	395	400	405
Gly	Gln	Leu	Pro	Pro	Gly	Leu	Leu	Leu	Leu	Gly	Gln	Ser	Leu	Leu	410	415	420
Leu	Phe	Phe	Phe	Leu	Thr	Ser	Phe								425		

<210> 293
 <211> 3449
 <212> DNA
 <213> Homo Sapien

<400> 293
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 gctccgtcct cgctccccc gagcgatccc cgaggagagc cgcgccctc 100
 ggcgaggcga agaggccgac gaggaagacc cgggtggctg cgccctgcc 150
 tcgcttccca ggcgccggcg gctgcagcct tgcccctctt gctcgccttg 200
 aaaatggaaa agatgctcgc aggtgcttt ctgctgatcc tcggacagat 250
 cgctcctcct cctgccgagg ccaggagagc gtcacgtggg aggtccatct 300
 ctaggggcag acacgctcgg acccaccgc agacggccct tctggagagt 350
 tcctgtgaga acaagcgggc agacctggtt ttcattcattg acagctctcg 400

cagtgtcaac acccatgact atgcaaaggt caaggagttc atcgtggaca 450
 tcttgcaatt cttggacatt ggtcctgatg tcacccgagt gggcctgctc 500
 caatatggca gcactgtcaa gaatgagttc tccctcaaga ctttcaagag 550
 gaagtccgag gtggagcgtg ctgtcaagag gatgcggcat ctgtccacgg 600
 gcaccatgac tgggctggcc atccagtatg ccctgaacat cgcattctca 650
 gaagcagagg gggcccggcc cctgagggag aatgtgccac gggtcataat 700
 gatcgtgaca gatgggagac ctcaggactc cgtggccgag gtggctgcta 750
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 aggctacatt ctcaactcgg atcagacgac ttgcagaatc caggatctgt 1050
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aagattagaa atcgcgacac atttgtagtc attgtatcac ggattacaat 3000
gaacgcagtg cagagcccca aagctcaggc tattgttaaa tcaataatgt 3050
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gacaagaagt atacactaac ttgtataaat ttatctagga aaaaaatcct 3150
tcagaattct aagatgaatt taccagggtga gaatgaataa gctatgcaag 3200
gtattttgta atatactgtg gacacaactt gcttctgcct catcctgcct 3250
tagtgtgcaa tctcatttga ctatacgata aagtttgcac agtcttactt 3300

ctgtagaaca ctggccatag gaaatgctgt tttttgtac tggactttac 3350
 cttgatatat gtatatggat gtatgcataa aatcatagga catatgtact 3400
 tgtggaacaa gttggatttt ttatacaata ttaaaattca ccacttcag 3449

<210> 294
 <211> 915
 <212> PRT
 <213> Homo Sapien

<400> 294
 Met Glu Lys Met Leu Ala Gly Cys Phe Leu Leu Ile Leu Gly Gln
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 20 25 30
 Ser Ile Ser Arg Gly Arg His Ala Arg Thr His Pro Gln Thr Ala
 35 40 45
 Leu Leu Glu Ser Ser Cys Glu Asn Lys Arg Ala Asp Leu Val Phe
 50 55 60
 Ile Ile Asp Ser Ser Arg Ser Val Asn Thr His Asp Tyr Ala Lys
 65 70 75
 Val Lys Glu Phe Ile Val Asp Ile Leu Gln Phe Leu Asp Ile Gly
 80 85 90
 Pro Asp Val Thr Arg Val Gly Leu Leu Gln Tyr Gly Ser Thr Val
 95 100 105
 Lys Asn Glu Phe Ser Leu Lys Thr Phe Lys Arg Lys Ser Glu Val
 110 115 120
 Glu Arg Ala Val Lys Arg Met Arg His Leu Ser Thr Gly Thr Met
 125 130 135
 Thr Gly Leu Ala Ile Gln Tyr Ala Leu Asn Ile Ala Phe Ser Glu
 140 145 150
 Ala Glu Gly Ala Arg Pro Leu Arg Glu Asn Val Pro Arg Val Ile
 155 160 165
 Met Ile Val Thr Asp Gly Arg Pro Gln Asp Ser Val Ala Glu Val
 170 175 180
 Ala Ala Lys Ala Arg Asp Thr Gly Ile Leu Ile Phe Ala Ile Gly
 185 190 195
 Val Gly Gln Val Asp Phe Asn Thr Leu Lys Ser Ile Gly Ser Glu
 200 205 210
 Pro His Glu Asp His Val Phe Leu Val Ala Asn Phe Ser Gln Ile
 215 220 225
 Glu Thr Leu Thr Ser Val Phe Gln Lys Lys Leu Cys Thr Ala His

Lys	Asp	Val	Cys	Gln	Ala	Ile	Asp	His	Gly	Cys	Glu	His	Ile	Cys	
				530					535					540	
Val	Asn	Ser	Asp	Asp	Ser	Tyr	Thr	Cys	Glu	Cys	Leu	Glu	Gly	Phe	
				545					550					555	
Arg	Leu	Ala	Glu	Asp	Gly	Lys	Arg	Cys	Arg	Arg	Lys	Asp	Val	Cys	
				560					565					570	
Lys	Ser	Thr	His	His	Gly	Cys	Glu	His	Ile	Cys	Val	Asn	Asn	Gly	
				575					580					585	
Asn	Ser	Tyr	Ile	Cys	Lys	Cys	Ser	Glu	Gly	Phe	Val	Leu	Ala	Glu	
				590					595					600	
Asp	Gly	Arg	Arg	Cys	Lys	Lys	Cys	Thr	Glu	Gly	Pro	Ile	Asp	Leu	
				605					610					615	
Val	Phe	Val	Ile	Asp	Gly	Ser	Lys	Ser	Leu	Gly	Glu	Glu	Asn	Phe	
				620					625					630	
Glu	Val	Val	Lys	Gln	Phe	Val	Thr	Gly	Ile	Ile	Asp	Ser	Leu	Thr	
				635					640					645	
Ile	Ser	Pro	Lys	Ala	Ala	Arg	Val	Gly	Leu	Leu	Gln	Tyr	Ser	Thr	
				650					655					660	
Gln	Val	His	Thr	Glu	Phe	Thr	Leu	Arg	Asn	Phe	Asn	Ser	Ala	Lys	
				665					670					675	
Asp	Met	Lys	Lys	Ala	Val	Ala	His	Met	Lys	Tyr	Met	Gly	Lys	Gly	
				680					685					690	
Ser	Met	Thr	Gly	Leu	Ala	Leu	Lys	His	Met	Phe	Glu	Arg	Ser	Phe	
				695					700					705	
Thr	Gln	Gly	Glu	Gly	Ala	Arg	Pro	Leu	Ser	Thr	Arg	Val	Pro	Arg	
				710					715					720	
Ala	Ala	Ile	Val	Phe	Thr	Asp	Gly	Arg	Ala	Gln	Asp	Asp	Val	Ser	
				725					730					735	
Glu	Trp	Ala	Ser	Lys	Ala	Lys	Ala	Asn	Gly	Ile	Thr	Met	Tyr	Ala	
				740					745					750	
Val	Gly	Val	Gly	Lys	Ala	Ile	Glu	Glu	Glu	Leu	Gln	Glu	Ile	Ala	
				755					760					765	
Ser	Glu	Pro	Thr	Asn	Lys	His	Leu	Phe	Tyr	Ala	Glu	Asp	Phe	Ser	
				770					775					780	
Thr	Met	Asp	Glu	Ile	Ser	Glu	Lys	Leu	Lys	Lys	Gly	Ile	Cys	Glu	
				785					790					795	
Ala	Leu	Glu	Asp	Ser	Asp	Gly	Arg	Gln	Asp	Ser	Pro	Ala	Gly	Glu	
				800					805					810	
Leu	Pro	Lys	Thr	Val	Gln	Gln	Pro	Thr	Glu	Ser	Glu	Pro	Val	Thr	

	815		820		825
Ile Asn Ile Gln Asp Leu Leu Ser Cys Ser Asn Phe Ala Val Gln					
	830		835		840
His Arg Tyr Leu Phe Glu Glu Asp Asn Leu Leu Arg Ser Thr Gln					
	845		850		855
Lys Leu Ser His Ser Thr Lys Pro Ser Gly Ser Pro Leu Glu Glu					
	860		865		870
Lys His Asp Gln Cys Lys Cys Glu Asn Leu Ile Met Phe Gln Asn					
	875		880		885
Leu Ala Asn Glu Glu Val Arg Lys Leu Thr Gln Arg Leu Glu Glu					
	890		895		900
Met Thr Gln Arg Met Glu Ala Leu Glu Asn Arg Leu Arg Tyr Arg					
	905		910		915

<210> 295
 <211> 1364
 <212> DNA
 <213> Homo Sapien

<400> 295
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 ccgcttctgc tgctgctgcc gcccgcgccg gagggcccca agaagccgac 150
 gccctgccac cggtgccggg ggctgggtgga caagttaaag caggggatgg 200
 tggacaccgc aaagaagaac tttggcgggc ggaacacggc ttgggaggaa 250
 aagacgctgt ccaagtacga gtccagcgag attcgcttgc tggagatcct 300
 ggaggggctg tgcgagagca gcgacttcga atgcaatcag atgctagagg 350
 cgcaggagga gcacctggag gcctgggtggc tgcagctgaa gagcgaatat 400
 cctgacttat tcgagtgggt ttgtgtgaag aactgaaag tgtgctgctc 450
 tccaggaacc tacggtcccg actgtctcgc atgccagggc ggatcccaga 500
 ggccctgcag cgggaatggc cactgcagcg gagatgggag cagacagggc 550
 gacgggtcct gccgggtgcca catgggggtac cagggcccgc tgtgactga 600
 ctgcatggac ggctacttca gctcgctccg gaacgagacc cacagcatct 650
 gcacagcctg tgacgagtcc tgcaagacgt gctcgggcct gaccaacaga 700
 gactgcggcg agtgtgaagt gggctgggtg ctggacgagg ggcctgtgt 750
 ggatgtggac gagtgtgcgg ccgagccgcc tccctgcagc gctgcgcagt 800

tctgtaagaa cgccaacggc tcctacacgt gcgaagagtg tgactccagc 850
 tgtgtgggct gcacagggga aggcccagga aactgtaaag agtgtatctc 900
 tggctacgcg agggagcacg gacagtgtgc agatgtggac gagtgtcac 950
 tagcagaaaa aacctgtgtg aggaaaaacg aaaactgcta caatactcca 1000
 gggagctacg tctgtgtgtg tcctgacggc ttcgaagaaa cggaagatgc 1050
 ctgtgtgccg ccggcagagg ctgaagccac agaaggagaa agcccgacac 1100
 agctgccctc ccgcgaagac ctgtaatgtg ccggacttac cctttaaatt 1150
 attcagaagg atgtcccgtg gaaaatgtgg ccctgaggat gccgtctcct 1200
 gcagtggaca gcggcgggga gaggctgcct gctctctaac ggttgattct 1250
 catttgtccc ttaaacagct gcatttcttg gttgttctta aacagacttg 1300
 tatattttga tacagttctt tgtaataaaa ttgaccattg taggtaatca 1350
 ggaggaaaaa aaaa 1364

<210> 296
 <211> 353
 <212> PRT
 <213> Homo Sapien

<400> 296
 Met Arg Leu Pro Arg Arg Ala Ala Leu Gly Leu Leu Pro Leu Leu
 1 5 10 15
 Leu Leu Leu Pro Pro Ala Pro Glu Ala Ala Lys Lys Pro Thr Pro
 20 25 30
 Cys His Arg Cys Arg Gly Leu Val Asp Lys Phe Asn Gln Gly Met
 35 40 45
 Val Asp Thr Ala Lys Lys Asn Phe Gly Gly Gly Asn Thr Ala Trp
 50 55 60
 Glu Glu Lys Thr Leu Ser Lys Tyr Glu Ser Ser Glu Ile Arg Leu
 65 70 75
 Leu Glu Ile Leu Glu Gly Leu Cys Glu Ser Ser Asp Phe Glu Cys
 80 85 90
 Asn Gln Met Leu Glu Ala Gln Glu Glu His Leu Glu Ala Trp Trp
 95 100 105
 Leu Gln Leu Lys Ser Glu Tyr Pro Asp Leu Phe Glu Trp Phe Cys
 110 115 120
 Val Lys Thr Leu Lys Val Cys Cys Ser Pro Gly Thr Tyr Gly Pro
 125 130 135
 Asp Cys Leu Ala Cys Gln Gly Gly Ser Gln Arg Pro Cys Ser Gly

	140		145		150
Asn Gly His Cys Ser Gly Asp Gly Ser Arg Gln Gly Asp Gly Ser	155		160		165
Cys Arg Cys His Met Gly Tyr Gln Gly Pro Leu Cys Thr Asp Cys	170		175		180
Met Asp Gly Tyr Phe Ser Ser Leu Arg Asn Glu Thr His Ser Ile	185		190		195
Cys Thr Ala Cys Asp Glu Ser Cys Lys Thr Cys Ser Gly Leu Thr	200		205		210
Asn Arg Asp Cys Gly Glu Cys Glu Val Gly Trp Val Leu Asp Glu	215		220		225
Gly Ala Cys Val Asp Val Asp Glu Cys Ala Ala Glu Pro Pro Pro	230		235		240
Cys Ser Ala Ala Gln Phe Cys Lys Asn Ala Asn Gly Ser Tyr Thr	245		250		255
Cys Glu Glu Cys Asp Ser Ser Cys Val Gly Cys Thr Gly Glu Gly	260		265		270
Pro Gly Asn Cys Lys Glu Cys Ile Ser Gly Tyr Ala Arg Glu His	275		280		285
Gly Gln Cys Ala Asp Val Asp Glu Cys Ser Leu Ala Glu Lys Thr	290		295		300
Cys Val Arg Lys Asn Glu Asn Cys Tyr Asn Thr Pro Gly Ser Tyr	305		310		315
Val Cys Val Cys Pro Asp Gly Phe Glu Glu Thr Glu Asp Ala Cys	320		325		330
Val Pro Pro Ala Glu Ala Glu Ala Thr Glu Gly Glu Ser Pro Thr	335		340		345
Gln Leu Pro Ser Arg Glu Asp Leu	350				

<210> 297
 <211> 2639
 <212> DNA
 <213> Homo Sapien

<400> 297
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 gaggagaaag agaaagaaga ggaagatggt gggcaacatt tatttaacat 100
 gctccacagc ccggaccctg gcatcatgct gctattcctg caaataactga 150
 agaagcatgg gatttaaata ttttacttct aaataaatga attactcaat 200

ctcctatgac catctataca tactccacct tcaaaaagta catcaatatt 250
 atatcattaa ggaaatagta accttctctt ctccaatatg catgacattt 300
 ttggacaatg caattgtggc actggcactt atttcagtga agaaaaactt 350
 tgtggttcta tggcattcat catttgacaa atgcaagcat cttccttata 400
 aatcagctcc tattgaactt actagcactg actgtggaat ccttaagggc 450
 ccattacatt tctgaagaag aaagctaaga tgaaggacat gccactccga 500
 attcatgtgc tacttggcct agctatcact acactagtag aagctgtaga 550
 taaaaaagtg gattgtccac gggtatgtac gtgtgaaatc aggccttggt 600
 ttacaccag atccatttat atggaagcat ctacagtga ttgtaatgat 650
 ttaggtcttt taactttccc agccagattg ccagctaaca cacagattct 700
 tctctacag actaacaata ttgcaaaaat tgaatactcc acagactttc 750
 cagtaaact tactggcctg gatttatctc aaaacaattt atcttcagtc 800
 accaatatta atgtaaaaaa gatgcctcag ctctttctg tgtacctaga 850
 ggaaaacaaa cttactgaac tgccctgaaa atgtctgtcc gaactgagca 900
 acttacaaga actctatatt aatcacact tgctttctac aatttcacct 950
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 tttaagctc ttatcaatct tcgcagcctg gttatagctg gtataaacct 1150
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 cattcacccc aatgcatttt tcagactccc caagctggaa tcactcatgc 1500
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gtacatcact gaaagtaaaa gcaactgtta taggtttacc aacaaatatg 2600
tcctaaaaac caccaaggaa acctactcca aaaatgaac 2639

<210> 298
<211> 708
<212> PRT
<213> Homo Sapien

<400> 298
Met Lys Asp Met Pro Leu Arg Ile His Val Leu Leu Gly Leu Ala
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Ile Thr Thr Leu Val Gln Ala Val Asp Lys Lys Val Asp Cys Pro
20 25 30
Arg Leu Cys Thr Cys Glu Ile Arg Pro Trp Phe Thr Pro Arg Ser
35 40 45
Ile Tyr Met Glu Ala Ser Thr Val Asp Cys Asn Asp Leu Gly Leu
50 55 60

Leu	Thr	Phe	Pro	Ala	Arg	Leu	Pro	Ala	Asn	Thr	Gln	Ile	Leu	Leu	65	70	75
Leu	Gln	Thr	Asn	Asn	Ile	Ala	Lys	Ile	Glu	Tyr	Ser	Thr	Asp	Phe	80	85	90
Pro	Val	Asn	Leu	Thr	Gly	Leu	Asp	Leu	Ser	Gln	Asn	Asn	Leu	Ser	95	100	105
Ser	Val	Thr	Asn	Ile	Asn	Val	Lys	Lys	Met	Pro	Gln	Leu	Leu	Ser	110	115	120
Val	Tyr	Leu	Glu	Glu	Asn	Lys	Leu	Thr	Glu	Leu	Pro	Glu	Lys	Cys	125	130	135
Leu	Ser	Glu	Leu	Ser	Asn	Leu	Gln	Glu	Leu	Tyr	Ile	Asn	His	Asn	140	145	150
Leu	Leu	Ser	Thr	Ile	Ser	Pro	Gly	Ala	Phe	Ile	Gly	Leu	His	Asn	155	160	165
Leu	Leu	Arg	Leu	His	Leu	Asn	Ser	Asn	Arg	Leu	Gln	Met	Ile	Asn	170	175	180
Ser	Lys	Trp	Phe	Asp	Ala	Leu	Pro	Asn	Leu	Glu	Ile	Leu	Met	Ile	185	190	195
Gly	Glu	Asn	Pro	Ile	Ile	Arg	Ile	Lys	Asp	Met	Asn	Phe	Lys	Pro	200	205	210
Leu	Ile	Asn	Leu	Arg	Ser	Leu	Val	Ile	Ala	Gly	Ile	Asn	Leu	Thr	215	220	225
Glu	Ile	Pro	Asp	Asn	Ala	Leu	Val	Gly	Leu	Glu	Asn	Leu	Glu	Ser	230	235	240
Ile	Ser	Phe	Tyr	Asp	Asn	Arg	Leu	Ile	Lys	Val	Pro	His	Val	Ala	245	250	255
Leu	Gln	Lys	Val	Val	Asn	Leu	Lys	Phe	Leu	Asp	Leu	Asn	Lys	Asn	260	265	270
Pro	Ile	Asn	Arg	Ile	Arg	Arg	Gly	Asp	Phe	Ser	Asn	Met	Leu	His	275	280	285
Leu	Lys	Glu	Leu	Gly	Ile	Asn	Asn	Met	Pro	Glu	Leu	Ile	Ser	Ile	290	295	300
Asp	Ser	Leu	Ala	Val	Asp	Asn	Leu	Pro	Asp	Leu	Arg	Lys	Ile	Glu	305	310	315
Ala	Thr	Asn	Asn	Pro	Arg	Leu	Ser	Tyr	Ile	His	Pro	Asn	Ala	Phe	320	325	330
Phe	Arg	Leu	Pro	Lys	Leu	Glu	Ser	Leu	Met	Leu	Asn	Ser	Asn	Ala	335	340	345
Leu	Ser	Ala	Leu	Tyr	His	Gly	Thr	Ile	Glu	Ser	Leu	Pro	Asn	Leu			

	350		355		360
Lys Glu Ile Ser	Ile His Ser Asn Pro	Ile Arg Cys Asp Cys	Val		
	365		370		375
Ile Arg Trp Met	Asn Met Asn Lys Thr	Asn Ile Arg Phe Met	Glu		
	380		385		390
Pro Asp Ser Leu	Phe Cys Val Asp Pro	Pro Glu Phe Gln Gly	Gln		
	395		400		405
Asn Val Arg Gln	Val His Phe Arg Asp	Met Met Glu Ile Cys	Leu		
	410		415		420
Pro Leu Ile Ala	Pro Glu Ser Phe Pro	Ser Asn Leu Asn Val	Glu		
	425		430		435
Ala Gly Ser Tyr	Val Ser Phe His Cys	Arg Ala Thr Ala Glu	Pro		
	440		445		450
Gln Pro Glu Ile	Tyr Trp Ile Thr Pro	Ser Gly Gln Lys Leu	Leu		
	455		460		465
Pro Asn Thr Leu	Thr Asp Lys Phe Tyr	Val His Ser Glu Gly	Thr		
	470		475		480
Leu Asp Ile Asn	Gly Val Thr Pro Lys	Glu Gly Gly Leu Tyr	Thr		
	485		490		495
Cys Ile Ala Thr	Asn Leu Val Gly Ala	Asp Leu Lys Ser Val	Met		
	500		505		510
Ile Lys Val Asp	Gly Ser Phe Pro Gln	Asp Asn Asn Gly Ser	Leu		
	515		520		525
Asn Ile Lys Ile	Arg Asp Ile Gln Ala	Asn Ser Val Leu Val	Ser		
	530		535		540
Trp Lys Ala Ser	Ser Lys Ile Leu Lys	Ser Ser Val Lys Trp	Thr		
	545		550		555
Ala Phe Val Lys	Thr Glu Asn Ser His	Ala Ala Gln Ser Ala	Arg		
	560		565		570
Ile Pro Ser Asp	Val Lys Val Tyr Asn	Leu Thr His Leu Asn	Pro		
	575		580		585
Ser Thr Glu Tyr	Lys Ile Cys Ile Asp	Ile Pro Thr Ile Tyr	Gln		
	590		595		600
Lys Asn Arg Lys	Lys Cys Val Asn Val	Thr Thr Lys Gly Leu	His		
	605		610		615
Pro Asp Gln Lys	Glu Tyr Glu Lys Asn	Asn Thr Thr Thr Leu	Met		
	620		625		630
Ala Cys Leu Gly	Gly Leu Leu Gly Ile	Ile Gly Val Ile Cys	Leu		
	635		640		645

Ile	Ser	Cys	Leu	Ser	Pro	Glu	Met	Asn	Cys	Asp	Gly	Gly	His	Ser
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Tyr	Val	Arg	Asn	Tyr	Leu	Gln	Lys	Pro	Thr	Phe	Ala	Leu	Gly	Glu
				665					670					675
Leu	Tyr	Pro	Pro	Leu	Ile	Asn	Leu	Trp	Glu	Ala	Gly	Lys	Glu	Lys
				680					685					690
Ser	Thr	Ser	Leu	Lys	Val	Lys	Ala	Thr	Val	Ile	Gly	Leu	Pro	Thr
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Asn Met Ser

<210> 299
<211> 1102
<212> DNA
<213> Homo Sapien

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<210> 300
 <211> 259
 <212> PRT
 <213> Homo Sapien

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 35 40 45
 His Ser Phe Lys Gly Glu Glu Cys Pro Ala Gly Ser His Arg Ser
 50 55 60
 Glu His Thr Gly Ala Cys Asn Pro Cys Thr Glu Gly Val Asp Tyr
 65 70 75
 Thr Asn Ala Ser Asn Asn Glu Pro Ser Cys Phe Pro Cys Thr Val
 80 85 90
 Cys Lys Ser Asp Gln Lys His Lys Ser Ser Cys Thr Met Thr Arg
 95 100 105
 Asp Thr Val Cys Gln Cys Lys Glu Gly Thr Phe Arg Asn Glu Asn
 110 115 120
 Ser Pro Glu Met Cys Arg Lys Cys Ser Arg Cys Pro Ser Gly Glu
 125 130 135
 Val Gln Val Ser Asn Cys Thr Ser Trp Asp Asp Ile Gln Cys Val
 140 145 150
 Glu Glu Phe Gly Ala Asn Ala Thr Val Glu Thr Pro Ala Ala Glu
 155 160 165
 Glu Thr Met Asn Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu
 170 175 180
 Glu Thr Met Asn Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu
 185 190 195
 Glu Thr Met Thr Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu
 200 205 210
 Glu Thr Met Thr Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu
 215 220 225

Glu	Thr	Met	Thr	Thr	Ser	Pro	Gly	Thr	Pro	Ala	Ser	Ser	His	Tyr
				230					235					240

Leu	Ser	Cys	Thr	Ile	Val	Gly	Ile	Ile	Val	Leu	Ile	Val	Leu	Leu
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Ile Val Phe Val

<210> 301

<211> 1576

<212> DNA

<213> Homo Sapien

<400> 301

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<210> 302

<211> 421

<212> PRT

<213> Homo Sapien

<400> 302

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				20					25					30	
Tyr	Asp	Gln	Glu	Pro	Asp	Asp	Asp	Tyr	Gln	Thr	Gly	Phe	Pro	Phe	
				35					40					45	
Arg	Gln	Asn	Val	Asp	Tyr	Gly	Val	Pro	Phe	His	Gln	Tyr	Thr	Leu	
				50					55					60	
Gly	Cys	Val	Ser	Glu	Cys	Phe	Cys	Pro	Thr	Asn	Phe	Pro	Ser	Ser	
				65					70					75	
Met	Tyr	Cys	Asp	Asn	Arg	Lys	Leu	Lys	Thr	Ile	Pro	Asn	Ile	Pro	
				80					85					90	
Met	His	Ile	Gln	Gln	Leu	Tyr	Leu	Gln	Phe	Asn	Glu	Ile	Glu	Ala	
				95					100					105	
Val	Thr	Ala	Asn	Ser	Phe	Ile	Asn	Ala	Thr	His	Leu	Lys	Glu	Ile	
				110					115					120	
Asn	Leu	Ser	His	Asn	Lys	Ile	Lys	Ser	Gln	Lys	Ile	Asp	Tyr	Gly	
				125					130					135	
Val	Phe	Ala	Lys	Leu	Pro	Asn	Leu	Leu	Gln	Leu	His	Leu	Glu	His	
				140					145					150	
Asn	Asn	Leu	Glu	Glu	Phe	Pro	Phe	Pro	Leu	Pro	Lys	Ser	Leu	Glu	
				155					160					165	

Arg	Leu	Leu	Leu	Gly	Tyr	Asn	Glu	Ile	Ser	Lys	Leu	Gln	Thr	Asn	
				170					175					180	
Ala	Met	Asp	Gly	Leu	Val	Asn	Leu	Thr	Met	Leu	Asp	Leu	Cys	Tyr	
				185					190					195	
Asn	Tyr	Leu	His	Asp	Ser	Leu	Leu	Lys	Asp	Lys	Ile	Phe	Ala	Lys	
				200					205					210	
Met	Glu	Lys	Leu	Met	Gln	Leu	Asn	Leu	Cys	Ser	Asn	Arg	Leu	Glu	
				215					220					225	
Ser	Met	Pro	Pro	Gly	Leu	Pro	Ser	Ser	Leu	Met	Tyr	Leu	Ser	Leu	
				230					235					240	
Glu	Asn	Asn	Ser	Ile	Ser	Ser	Ile	Pro	Glu	Lys	Tyr	Phe	Asp	Lys	
				245					250					255	
Leu	Pro	Lys	Leu	His	Thr	Leu	Arg	Met	Ser	His	Asn	Lys	Leu	Gln	
				260					265					270	
Asp	Ile	Pro	Tyr	Asn	Ile	Phe	Asn	Leu	Pro	Asn	Ile	Val	Glu	Leu	
				275					280					285	
Ser	Val	Gly	His	Asn	Lys	Leu	Lys	Gln	Ala	Phe	Tyr	Ile	Pro	Arg	
				290					295					300	
Asn	Leu	Glu	His	Leu	Tyr	Leu	Gln	Asn	Asn	Glu	Ile	Glu	Lys	Met	
				305					310					315	
Asn	Leu	Thr	Val	Met	Cys	Pro	Ser	Ile	Asp	Pro	Leu	His	Tyr	His	
				320					325					330	
His	Leu	Thr	Tyr	Ile	Arg	Val	Asp	Gln	Asn	Lys	Leu	Lys	Glu	Pro	
				335					340					345	
Ile	Ser	Ser	Tyr	Ile	Phe	Phe	Cys	Phe	Pro	His	Ile	His	Thr	Ile	
				350					355					360	
Tyr	Tyr	Gly	Glu	Gln	Arg	Ser	Thr	Asn	Gly	Gln	Thr	Ile	Gln	Leu	
				365					370					375	
Lys	Thr	Gln	Val	Phe	Arg	Arg	Phe	Pro	Asp	Asp	Asp	Asp	Glu	Ser	
				380					385					390	
Glu	Asp	His	Asp	Asp	Pro	Asp	Asn	Ala	His	Glu	Ser	Pro	Glu	Gln	
				395					400					405	
Glu	Gly	Ala	Glu	Gly	His	Phe	Asp	Leu	His	Tyr	Tyr	Glu	Asn	Gln	
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Glu

<210> 303
 <211> 1305
 <212> DNA
 <213> Homo Sapien

<400> 303

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<210> 304

<211> 259

<212> PRT

<213> Homo Sapien

<400> 304

Met	Asn	Leu	Val	Asp	Leu	Trp	Leu	Thr	Arg	Ser	Leu	Ser	Met	Cys
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Leu	Leu	Leu	Gln	Ser	Phe	Val	Leu	Met	Ile	Leu	Cys	Phe	His	Ser
				20					25					30

Ala	Ser	Met	Cys	Pro	Lys	Gly	Cys	Leu	Cys	Ser	Ser	Ser	Gly	Gly
				35					40					45

Leu	Asn	Val	Thr	Cys	Ser	Asn	Ala	Asn	Leu	Lys	Glu	Ile	Pro	Arg
				50					55					60

Asp	Leu	Pro	Pro	Glu	Thr	Val	Leu	Leu	Tyr	Leu	Asp	Ser	Asn	Gln
				65					70					75

Ile	Thr	Ser	Ile	Pro	Asn	Glu	Ile	Phe	Lys	Asp	Leu	His	Gln	Leu
				80					85					90

Arg	Val	Leu	Asn	Leu	Ser	Lys	Asn	Gly	Ile	Glu	Phe	Ile	Asp	Glu
				95					100					105

His	Ala	Phe	Lys	Gly	Val	Ala	Glu	Thr	Leu	Gln	Thr	Leu	Asp	Leu
				110					115					120

Ser	Asp	Asn	Arg	Ile	Gln	Ser	Val	His	Lys	Asn	Ala	Phe	Asn	Asn
				125					130					135

Leu	Lys	Ala	Arg	Ala	Arg	Ile	Ala	Asn	Asn	Pro	Trp	His	Cys	Asp
				140					145					150

Cys	Thr	Leu	Gln	Gln	Val	Leu	Arg	Ser	Met	Ala	Ser	Asn	His	Glu
				155					160					165

Thr	Ala	His	Asn	Val	Ile	Cys	Lys	Thr	Ser	Val	Leu	Asp	Glu	His
				170					175					180

Ala	Gly	Arg	Pro	Phe	Leu	Asn	Ala	Ala	Asn	Asp	Ala	Asp	Leu	Cys
				185					190					195

Asn	Leu	Pro	Lys	Lys	Thr	Thr	Asp	Tyr	Ala	Met	Leu	Val	Thr	Met
				200					205					210

Phe	Gly	Trp	Phe	Thr	Met	Val	Ile	Ser	Tyr	Val	Val	Tyr	Tyr	Val
				215					220					225

Arg	Gln	Asn	Gln	Glu	Asp	Ala	Arg	Arg	His	Leu	Glu	Tyr	Leu	Lys
				230					235					240

Ser	Leu	Pro	Ser	Arg	Gln	Lys	Lys	Ala	Asp	Glu	Pro	Asp	Asp	Ile
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Ser Thr Val Val

<210> 305

<211> 2822
<212> DNA
<213> Homo Sapien

<400> 305

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<210> 306

<211> 690

<212> PRT

<213> Homo Sapien

<400> 306

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Ala Lys Cys Glu Ile Arg Asn Gly Ile Glu Ala Cys Tyr Cys Asn
35 40 45

Met Gly Phe Ser Gly Asn Gly Val Thr Ile Cys Glu Asp Asp Asn
50 55 60

Glu Cys Gly Asn Leu Thr Gln Ser Cys Gly Glu Asn Ala Asn Cys
65 70 75

Thr Asn Thr Glu Gly Ser Tyr Tyr Cys Met Cys Val Pro Gly Phe
80 85 90

Arg Ser Ser Ser Asn Gln Asp Arg Phe Ile Thr Asn Asp Gly Thr
95 100 105

Val Cys Ile Glu Asn Val Asn Ala Asn Cys His Leu Asp Asn Val
110 115 120

Cys Ile Ala Ala Asn Ile Asn Lys Thr Leu Thr Lys Ile Arg Ser
125 130 135

Ile Lys Glu Pro Val Ala Leu Leu Gln Glu Val Tyr Arg Asn Ser
140 145 150

Val Thr Asp Leu Ser Pro Thr Asp Ile Ile Thr Tyr Ile Glu Ile
155 160 165

Leu Ala Glu Ser Ser Ser Leu Leu Gly Tyr Lys Asn Asn Thr Ile
170 175 180

Ser Ala Lys Asp Thr Leu Ser Asn Ser Thr Leu Thr Glu Phe Val
185 190 195

Lys Thr Val Asn Asn Phe Val Gln Arg Asp Thr Phe Val Val Trp
200 205 210

Asp Lys Leu Ser Val Asn His Arg Arg Thr His Leu Thr Lys Leu
215 220 225

Met His Thr Val Glu Gln Ala Thr Leu Arg Ile Ser Gln Ser Phe
230 235 240

Gln Lys Thr Thr Glu Phe Asp Thr Asn Ser Thr Asp Ile Ala Leu
245 250 255

Lys	Val	Phe	Phe	Phe	Asp	Ser	Tyr	Asn	Met	Lys	His	Ile	His	Pro
				260					265					270
His	Met	Asn	Met	Asp	Gly	Asp	Tyr	Ile	Asn	Ile	Phe	Pro	Lys	Arg
				275					280					285
Lys	Ala	Ala	Tyr	Asp	Ser	Asn	Gly	Asn	Val	Ala	Val	Ala	Phe	Leu
				290					295					300
Tyr	Tyr	Lys	Ser	Ile	Gly	Pro	Leu	Leu	Ser	Ser	Ser	Asp	Asn	Phe
				305					310					315
Leu	Leu	Lys	Pro	Gln	Asn	Tyr	Asp	Asn	Ser	Glu	Glu	Glu	Glu	Arg
				320					325					330
Val	Ile	Ser	Ser	Val	Ile	Ser	Val	Ser	Met	Ser	Ser	Asn	Pro	Pro
				335					340					345
Thr	Leu	Tyr	Glu	Leu	Glu	Lys	Ile	Thr	Phe	Thr	Leu	Ser	His	Arg
				350					355					360
Lys	Val	Thr	Asp	Arg	Tyr	Arg	Ser	Leu	Cys	Ala	Phe	Trp	Asn	Tyr
				365					370					375
Ser	Pro	Asp	Thr	Met	Asn	Gly	Ser	Trp	Ser	Ser	Glu	Gly	Cys	Glu
				380					385					390
Leu	Thr	Tyr	Ser	Asn	Glu	Thr	His	Thr	Ser	Cys	Arg	Cys	Asn	His
				395					400					405
Leu	Thr	His	Phe	Ala	Ile	Leu	Met	Ser	Ser	Gly	Pro	Ser	Ile	Gly
				410					415					420
Ile	Lys	Asp	Tyr	Asn	Ile	Leu	Thr	Arg	Ile	Thr	Gln	Leu	Gly	Ile
				425					430					435
Ile	Ile	Ser	Leu	Ile	Cys	Leu	Ala	Ile	Cys	Ile	Phe	Thr	Phe	Trp
				440					445					450
Phe	Phe	Ser	Glu	Ile	Gln	Ser	Thr	Arg	Thr	Thr	Ile	His	Lys	Asn
				455					460					465
Leu	Cys	Cys	Ser	Leu	Phe	Leu	Ala	Glu	Leu	Val	Phe	Leu	Val	Gly
				470					475					480
Ile	Asn	Thr	Asn	Thr	Asn	Lys	Leu	Phe	Cys	Ser	Ile	Ile	Ala	Gly
				485					490					495
Leu	Leu	His	Tyr	Phe	Phe	Leu	Ala	Ala	Phe	Ala	Trp	Met	Cys	Ile
				500					505					510
Glu	Gly	Ile	His	Leu	Tyr	Leu	Ile	Val	Val	Gly	Val	Ile	Tyr	Asn
				515					520					525
Lys	Gly	Phe	Leu	His	Lys	Asn	Phe	Tyr	Ile	Phe	Gly	Tyr	Leu	Ser
				530					535					540
Pro	Ala	Val	Val	Val	Gly	Phe	Ser	Ala	Ala	Leu	Gly	Tyr	Arg	Tyr

				545					550					555	
Tyr	Gly	Thr	Thr	Lys	Val	Cys	Trp	Leu	Ser	Thr	Glu	Asn	Asn	Phe	
				560					565					570	
Ile	Trp	Ser	Phe	Ile	Gly	Pro	Ala	Cys	Leu	Ile	Ile	Leu	Val	Asn	
				575					580					585	
Leu	Leu	Ala	Phe	Gly	Val	Ile	Ile	Tyr	Lys	Val	Phe	Arg	His	Thr	
				590					595					600	
Ala	Gly	Leu	Lys	Pro	Glu	Val	Ser	Cys	Phe	Glu	Asn	Ile	Arg	Ser	
				605					610					615	
Cys	Ala	Arg	Gly	Ala	Leu	Ala	Leu	Leu	Phe	Leu	Leu	Gly	Thr	Thr	
				620					625					630	
Trp	Ile	Phe	Gly	Val	Leu	His	Val	Val	His	Ala	Ser	Val	Val	Thr	
				635					640					645	
Ala	Tyr	Leu	Phe	Thr	Val	Ser	Asn	Ala	Phe	Gln	Gly	Met	Phe	Ile	
				650					655					660	
Phe	Leu	Phe	Leu	Cys	Val	Leu	Ser	Arg	Lys	Ile	Gln	Glu	Glu	Tyr	
				665					670					675	
Tyr	Arg	Leu	Phe	Lys	Asn	Val	Pro	Cys	Cys	Phe	Gly	Cys	Leu	Arg	
				680					685					690	

<210> 307
 <211> 2033
 <212> DNA
 <213> Homo Sapien

<400> 307
 ccaggccggg aggcgacgcg cccagccgtc taaacgggaa cagccctggc 50
 tgagggagct gcagcgcagc agagtatctg acggcgccag gttgcgtagg 100
 tgcggcacga ggagttttcc cggcagcgag gaggtcctga gcagcatggc 150
 ccggaggagc gccttccttg ccgccgcgct ctggctctgg agcatcctcc 200
 tgtgcctgct ggcactgcgg gcggaggccg ggccgcccga ggaggagagc 250
 ctgtacctat ggatcgatgc tcaccaggca agagtactca taggatttga 300
 agaagatatc ctgattgttt cagaggggaa aatggcacct tttacacatg 350
 atttcagaaa agcgcaacag agaatgccag ctattcctgt caatatccat 400
 tccatgaatt ttacctggca agctgcaggg caggcagaat acttctatga 450
 attcctgtcc ttgcgctccc tggataaagg catcatggca gatccaaccg 500
 tcaatgtccc tctgctggga acagtgcctc acaaggcatc agttgttcaa 550
 gttggtttcc catgtcttgg aaaacaggat ggggtggcag catttgaagt 600

ggatgtgatt gttatgaatt ctgaaggcaa caccattctc caaacacctc 650
 aaaatgctat cttcttttaa acatgtcaac aagctgagtg cccaggcggg 700
 tgccgaaatg gaggcttttg taatgaaaga cgcattctgc agtgtcctga 750
 tgggttccac ggacctcact gtgagaaagc cttttgtacc ccacgatgta 800
 tgaatggtgg actttgtgtg actcctgggt tctgcatctg cccacctgga 850
 ttctatggag tgaactgtga caaagcaaac tgctcaacca cctgctttaa 900
 tggagggacc tgtttctacc ctggaaaatg tatttgccct ccaggactag 950
 agggagagca gtgtgaaatc agcaaagcc cacaaccctg tcgaaatgga 1000
 ggtaaagca ttggtaaaag caaatgtaag tggtccaaag gttaccaggg 1050
 agacctctgt tcaaagcctg tctgcgagcc tggctgtggt gcacatggaa 1100
 cctgccatga acccaacaaa tgccaatgtc aagaagggtg gcatggaaga 1150
 cactgcaata aaaggtacga agccagcctc atacatgcc tgaggccagc 1200
 aggcgccag ctcaggcagc acacgccttc acttaaaaag gccgaggagc 1250
 ggcgggatcc acctgaatcc aattacatct ggtgaactcc gacatctgaa 1300
 acgttttaag ttacaccaag ttcatagcct ttgttaacct ttcattgtgt 1350
 gaatgttcaa ataattgtca ttacacttaa gaatactggc ctgaatttta 1400
 ttagcttcat tataaatcac tgagctgata tttactcttc cttttaagtt 1450
 ttctaagtac gtctgtagca tgatggtata gattttcttg tttcagtgtc 1500
 ttgggacaga ttttatatta tgtcaattga tcagggtaaa attttcagtg 1550
 tgtagttggc agatattttc aaaattacaa tgcatttatg gtgtctgggg 1600
 gcaggggaac atcagaaagg ttaaattggg caaaaatgcg taagtcacaa 1650
 gaatttgat ggtgcagtta atgttgaagt tacagcattt cagattttat 1700
 tgtcagatat ttagatgttt gttacatttt taaaaattgc tcttaatttt 1750
 taaactctca atacaatata ttttgacctt accattattc cagagattca 1800
 gtattaaaaa aaaaaaatt acactgtggt agtggcattt aaacaatata 1850
 atatattcta aacacaatga aatagggaat ataattgtat aactttttgc 1900
 attggcttga agcaatataa tatattgtaa acaaaacaca gctcttacct 1950
 aataaacatt ttatactgtt tgtatgtata aaataaagg gctgcttttag 2000
 ttttttgga aaaaaaaaaa aaaaaaaaaa aaa 2033

<210> 308
 <211> 379
 <212> PRT
 <213> Homo Sapien

<400> 308

Met	Ala	Arg	Arg	Ser	Ala	Phe	Pro	Ala	Ala	Ala	Leu	Trp	Leu	Trp	1	5	10	15
Ser	Ile	Leu	Leu	Cys	Leu	Leu	Ala	Leu	Arg	Ala	Glu	Ala	Gly	Pro	20	25	30	
Pro	Gln	Glu	Glu	Ser	Leu	Tyr	Leu	Trp	Ile	Asp	Ala	His	Gln	Ala	35	40	45	
Arg	Val	Leu	Ile	Gly	Phe	Glu	Glu	Asp	Ile	Leu	Ile	Val	Ser	Glu	50	55	60	
Gly	Lys	Met	Ala	Pro	Phe	Thr	His	Asp	Phe	Arg	Lys	Ala	Gln	Gln	65	70	75	
Arg	Met	Pro	Ala	Ile	Pro	Val	Asn	Ile	His	Ser	Met	Asn	Phe	Thr	80	85	90	
Trp	Gln	Ala	Ala	Gly	Gln	Ala	Glu	Tyr	Phe	Tyr	Glu	Phe	Leu	Ser	95	100	105	
Leu	Arg	Ser	Leu	Asp	Lys	Gly	Ile	Met	Ala	Asp	Pro	Thr	Val	Asn	110	115	120	
Val	Pro	Leu	Leu	Gly	Thr	Val	Pro	His	Lys	Ala	Ser	Val	Val	Gln	125	130	135	
Val	Gly	Phe	Pro	Cys	Leu	Gly	Lys	Gln	Asp	Gly	Val	Ala	Ala	Phe	140	145	150	
Glu	Val	Asp	Val	Ile	Val	Met	Asn	Ser	Glu	Gly	Asn	Thr	Ile	Leu	155	160	165	
Gln	Thr	Pro	Gln	Asn	Ala	Ile	Phe	Phe	Lys	Thr	Cys	Gln	Gln	Ala	170	175	180	
Glu	Cys	Pro	Gly	Gly	Cys	Arg	Asn	Gly	Gly	Phe	Cys	Asn	Glu	Arg	185	190	195	
Arg	Ile	Cys	Glu	Cys	Pro	Asp	Gly	Phe	His	Gly	Pro	His	Cys	Glu	200	205	210	
Lys	Ala	Leu	Cys	Thr	Pro	Arg	Cys	Met	Asn	Gly	Gly	Leu	Cys	Val	215	220	225	
Thr	Pro	Gly	Phe	Cys	Ile	Cys	Pro	Pro	Gly	Phe	Tyr	Gly	Val	Asn	230	235	240	
Cys	Asp	Lys	Ala	Asn	Cys	Ser	Thr	Thr	Cys	Phe	Asn	Gly	Gly	Thr	245	250	255	
Cys	Phe	Tyr	Pro	Gly	Lys	Cys	Ile	Cys	Pro	Pro	Gly	Leu	Glu	Gly				

	260		265		270
Glu Gln Cys Glu Ile Ser Lys Cys Pro Gln Pro Cys Arg Asn Gly					
	275		280		285
Gly Lys Cys Ile Gly Lys Ser Lys Cys Lys Cys Ser Lys Gly Tyr					
	290		295		300
Gln Gly Asp Leu Cys Ser Lys Pro Val Cys Glu Pro Gly Cys Gly					
	305		310		315
Ala His Gly Thr Cys His Glu Pro Asn Lys Cys Gln Cys Gln Glu					
	320		325		330
Gly Trp His Gly Arg His Cys Asn Lys Arg Tyr Glu Ala Ser Leu					
	335		340		345
Ile His Ala Leu Arg Pro Ala Gly Ala Gln Leu Arg Gln His Thr					
	350		355		360
Pro Ser Leu Lys Lys Ala Glu Glu Arg Arg Asp Pro Pro Glu Ser					
	365		370		375

Asn Tyr Ile Trp

<210> 309
 <211> 1843
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 1837
 <223> unknown base

<400> 309
 cccacgcgctc cgggtctcgct cgctcgcgca gcggcggcag cagaggtcgc 50
 gcacagatgc gggtttagact ggcgggggga ggaggcggag gaggggaagga 100
 agctgcatgc atgagacca cagactcttg caagctggat gccctctgtg 150
 gatgaaagat gtatcatgga atgaaccgga gcaatggaga tggatttcta 200
 gagcagcagc agcagcagca gcaacctcag tccccccaga gactcttggc 250
 cgtgatcctg tggtttcagc tggcgctgtg cttcggccct gcacagctca 300
 cgggcggggtt cgatgacctt caagtgtgtg ctgaccccg g cattcccgag 350
 aatggcttca ggacccccag cggagggggtt ttctttgaag gctctgtagc 400
 ccgatttcac tgccaagacg gattcaagct gaagggcgct acaaagagac 450
 tgtgtttgaa gcattttaat ggaaccctag gctggatccc aagtgataat 500
 tccatctgtg tgcaagaaga ttgccgtatc cctcaaatac aagatgctga 550

gattcataac aagacatata gacatggaga gaagctaata atcacttggtc 600
 atgaaggatt caagatccgg taccgccgacc tacacaatat ggtttcatta 650
 tgtcgcgatg atggaacgtg gaataatctg cccatctgtc aaggctgcct 700
 gagacctcta gcctcttcta atggctatgt aaacatctct gagctccaga 750
 cctccttccc ggtggggact gtgatctcct atcgctgctt tcccggattt 800
 aaacttgatg ggtctgcgta tcttgagtgc ttacaaaacc ttatctgggtc 850
 gtccagccca ccccggtgcc ttgctctgga agcccaagtc tgtccactac 900
 ctccaatggg gagtcacgga gatttcgtct gccacccgcg gccttggtgag 950
 cgctacaacc acggaactgt ggtggagttt tactgcgatc ctggctacag 1000
 cctcaccagc gactacaagt acatcacctg ccagtatgga gagtggtttc 1050
 cttcttatca agtctactgc atcaaatacag agcaaactg gccacgacc 1100
 catgagaccc tcctgaccac gtggaagatt gtggcggtca cggcaaccag 1150
 tgtgctgctg gtgctgctgc tcgtcactct ggccaggatg ttccagacca 1200
 agttcaaggc ccactttccc cccagggggc ctccccggag ttccagcagt 1250
 gaccctgact ttgtggtggt agacggcgtg cccgtcatgc tcccgctcta 1300
 tgacgaagct gtgagtggcg gcttgagtgc cttaggcccc gggtacatgg 1350
 cctctgtggg ccagggtgc cccttaccgc tggacgacca gagcccccca 1400
 gcataccccg gctcagggga cacggacaca ggcccagggg agtcagaaac 1450
 ctgtgacagc gtctcaggct cttctgagct gctccaaagt ctgtattcac 1500
 ctcccagggt ccaagagagc acccaccctg cttcggacaa ccctgacata 1550
 attgccagca cggcagagga ggtggcatcc accagcccag gcatccatca 1600
 tgcccactgg gtgttggtcc taagaaactg attgattaaa aaatttccca 1650
 aagtgtcctg aagtgtctct tcaaatacat gttgatctgt ggagttgatt 1700
 cctttccttc tcttggtttt agacaaatgt aaacaaagct ctgaccta 1750
 aaattgctat gctgatagag tggtaggggc tggaagcttg atcaagtcct 1800
 gtttcttctt gacacagact gattaaaaat taaaagnaaa aaa 1843

<210> 310

<211> 490

<212> PRT

<213> Homo Sapien

<400> 310

Met	Tyr	His	Gly	Met	Asn	Pro	Ser	Asn	Gly	Asp	Gly	Phe	Leu	Glu	1	5	10	15
Gln	Gln	Gln	Gln	Gln	Gln	Gln	Pro	Gln	Ser	Pro	Gln	Arg	Leu	Leu	20	25	30	
Ala	Val	Ile	Leu	Trp	Phe	Gln	Leu	Ala	Leu	Cys	Phe	Gly	Pro	Ala	35	40	45	
Gln	Leu	Thr	Gly	Gly	Phe	Asp	Asp	Leu	Gln	Val	Cys	Ala	Asp	Pro	50	55	60	
Gly	Ile	Pro	Glu	Asn	Gly	Phe	Arg	Thr	Pro	Ser	Gly	Gly	Val	Phe	65	70	75	
Phe	Glu	Gly	Ser	Val	Ala	Arg	Phe	His	Cys	Gln	Asp	Gly	Phe	Lys	80	85	90	
Leu	Lys	Gly	Ala	Thr	Lys	Arg	Leu	Cys	Leu	Lys	His	Phe	Asn	Gly	95	100	105	
Thr	Leu	Gly	Trp	Ile	Pro	Ser	Asp	Asn	Ser	Ile	Cys	Val	Gln	Glu	110	115	120	
Asp	Cys	Arg	Ile	Pro	Gln	Ile	Glu	Asp	Ala	Glu	Ile	His	Asn	Lys	125	130	135	
Thr	Tyr	Arg	His	Gly	Glu	Lys	Leu	Ile	Ile	Thr	Cys	His	Glu	Gly	140	145	150	
Phe	Lys	Ile	Arg	Tyr	Pro	Asp	Leu	His	Asn	Met	Val	Ser	Leu	Cys	155	160	165	
Arg	Asp	Asp	Gly	Thr	Trp	Asn	Asn	Leu	Pro	Ile	Cys	Gln	Gly	Cys	170	175	180	
Leu	Arg	Pro	Leu	Ala	Ser	Ser	Asn	Gly	Tyr	Val	Asn	Ile	Ser	Glu	185	190	195	
Leu	Gln	Thr	Ser	Phe	Pro	Val	Gly	Thr	Val	Ile	Ser	Tyr	Arg	Cys	200	205	210	
Phe	Pro	Gly	Phe	Lys	Leu	Asp	Gly	Ser	Ala	Tyr	Leu	Glu	Cys	Leu	215	220	225	
Gln	Asn	Leu	Ile	Trp	Ser	Ser	Ser	Pro	Pro	Arg	Cys	Leu	Ala	Leu	230	235	240	
Glu	Ala	Gln	Val	Cys	Pro	Leu	Pro	Pro	Met	Val	Ser	His	Gly	Asp	245	250	255	
Phe	Val	Cys	His	Pro	Arg	Pro	Cys	Glu	Arg	Tyr	Asn	His	Gly	Thr	260	265	270	
Val	Val	Glu	Phe	Tyr	Cys	Asp	Pro	Gly	Tyr	Ser	Leu	Thr	Ser	Asp	275	280	285	
Tyr	Lys	Tyr	Ile	Thr	Cys	Gln	Tyr	Gly	Glu	Trp	Phe	Pro	Ser	Tyr				

	290		295		300
Gln Val Tyr Cys Ile Lys Ser Glu Gln Thr Trp Pro Ser Thr His	305		310		315
Glu Thr Leu Leu Thr Thr Trp Lys Ile Val Ala Phe Thr Ala Thr	320		325		330
Ser Val Leu Leu Val Leu Leu Leu Val Ile Leu Ala Arg Met Phe	335		340		345
Gln Thr Lys Phe Lys Ala His Phe Pro Pro Arg Gly Pro Pro Arg	350		355		360
Ser Ser Ser Ser Asp Pro Asp Phe Val Val Val Asp Gly Val Pro	365		370		375
Val Met Leu Pro Ser Tyr Asp Glu Ala Val Ser Gly Gly Leu Ser	380		385		390
Ala Leu Gly Pro Gly Tyr Met Ala Ser Val Gly Gln Gly Cys Pro	395		400		405
Leu Pro Val Asp Asp Gln Ser Pro Pro Ala Tyr Pro Gly Ser Gly	410		415		420
Asp Thr Asp Thr Gly Pro Gly Glu Ser Glu Thr Cys Asp Ser Val	425		430		435
Ser Gly Ser Ser Glu Leu Leu Gln Ser Leu Tyr Ser Pro Pro Arg	440		445		450
Cys Gln Glu Ser Thr His Pro Ala Ser Asp Asn Pro Asp Ile Ile	455		460		465
Ala Ser Thr Ala Glu Glu Val Ala Ser Thr Ser Pro Gly Ile His	470		475		480
His Ala His Trp Val Leu Phe Leu Arg Asn	485		490		

<210> 311
 <211> 1210
 <212> DNA
 <213> Homo Sapien

<400> 311
 cagcgcgtgg ccggcgccgc tgtggggaca gcatgagcgg cggttggatg 50
 gcgcaggttg gaggcgtggcg aacaggggct ctgggcctgg cgctgctgct 100
 gctgctcggc ctcggactag gcctggaggc cgccgcgagc ccgctttcca 150
 ccccgacctc tgcccaggcc gcaggcccca gctcaggctc gtgcccaccc 200
 accaagttcc agtgccgcac cagtggctta tgcgtgcccc tcacctggcg 250
 ctgcgacagg gacttggact gcagcgatgg cagcgatgag gaggagtgc 300

Arg	Asp	Leu	Asp	Cys	Ser	Asp	Gly	Ser	Asp	Glu	Glu	Glu	Cys	Arg	
				80					85					90	
Ile	Glu	Pro	Cys	Thr	Gln	Lys	Gly	Gln	Cys	Pro	Pro	Pro	Pro	Gly	
				95					100					105	
Leu	Pro	Cys	Pro	Cys	Thr	Gly	Val	Ser	Asp	Cys	Ser	Gly	Gly	Thr	
				110					115					120	
Asp	Lys	Lys	Leu	Arg	Asn	Cys	Ser	Arg	Leu	Ala	Cys	Leu	Ala	Gly	
				125					130					135	
Glu	Leu	Arg	Cys	Thr	Leu	Ser	Asp	Asp	Cys	Ile	Pro	Leu	Thr	Trp	
				140					145					150	
Arg	Cys	Asp	Gly	His	Pro	Asp	Cys	Pro	Asp	Ser	Ser	Asp	Glu	Leu	
				155					160					165	
Gly	Cys	Gly	Thr	Asn	Glu	Ile	Leu	Pro	Glu	Gly	Asp	Ala	Thr	Thr	
				170					175					180	
Met	Gly	Pro	Pro	Val	Thr	Leu	Glu	Ser	Val	Thr	Ser	Leu	Arg	Asn	
				185					190					195	
Ala	Thr	Thr	Met	Gly	Pro	Pro	Val	Thr	Leu	Glu	Ser	Val	Pro	Ser	
				200					205					210	
Val	Gly	Asn	Ala	Thr	Ser	Ser	Ser	Ala	Gly	Asp	Gln	Ser	Gly	Ser	
				215					220					225	
Pro	Thr	Ala	Tyr	Gly	Val	Ile	Ala	Ala	Ala	Ala	Val	Leu	Ser	Ala	
				230					235					240	
Ser	Leu	Val	Thr	Ala	Thr	Leu	Leu	Leu	Leu	Ser	Trp	Leu	Arg	Ala	
				245					250					255	
Gln	Glu	Arg	Leu	Arg	Pro	Leu	Gly	Leu	Leu	Val	Ala	Met	Lys	Glu	
				260					265					270	
Ser	Leu	Leu	Leu	Ser	Glu	Gln	Lys	Thr	Ser	Leu	Pro				
				275					280						

<210> 313
 <211> 2197
 <212> DNA
 <213> Homo Sapien

<400> 313
 cggacgcgtg ggcgtccggc ggctgcagag ccaggaggcg gaggcgcgcg 50
 ggccagcctg ggccccagcc cacaccttca ccagggccca ggagccacca 100
 tgtggcgatg tccactgggg ctactgctgt tgctgccgct ggctggccac 150
 ttggctctgg gtgcccagca gggtcgtggg cgccgggagc tagcaccggg 200
 tctgcacctg cggggcatcc gggacgcggg aggccggtac tgccaggagc 250

ggggcagggc ctggcctggg aagagcacag ctgcagatcc caggcctctg 1750
 gcgccccac tcaagactac caaagccagg acacctcaag tctccagccc 1800
 caatacccca cccaatccc gtattctttt tttttttttt ttagacaggg 1850
 tcttgctccg ttgcccaggt tggagtgcag tggcccatca gggctcactg 1900
 taacctccga ctctggggtt caagtgaccc tcccacctca gcctctcaag 1950
 tagctgggac tacagggtgca ccaccacacc tggctaattt ttgtattttt 2000
 tgtaaagagg ggggtctcac tgtgttgccc aggctgggtt cgaactcctg 2050
 ggctcaagcg gtccacctgc ctccgcctcc caaagtgcctg ggattgcagg 2100
 catgagccac tgcacccagc cctgtattct tattcttcag atatttattt 2150
 ttcttttcac tgttttaaaa taaaaccaaa gtattgataa aaaaaaa 2197

<210> 314

<211> 164

<212> PRT

<213> Homo Sapien

<400> 314

Met	Trp	Arg	Cys	Pro	Leu	Gly	Leu	Leu	Leu	Leu	Leu	Pro	Leu	Ala
1				5				10						15
Gly	His	Leu	Ala	Leu	Gly	Ala	Gln	Gln	Gly	Arg	Gly	Arg	Arg	Glu
				20				25						30
Leu	Ala	Pro	Gly	Leu	His	Leu	Arg	Gly	Ile	Arg	Asp	Ala	Gly	Gly
				35				40						45
Arg	Tyr	Cys	Gln	Glu	Gln	Asp	Leu	Cys	Cys	Arg	Gly	Arg	Ala	Asp
				50				55						60
Asp	Cys	Ala	Leu	Pro	Tyr	Leu	Gly	Ala	Ile	Cys	Tyr	Cys	Asp	Leu
				65				70						75
Phe	Cys	Asn	Arg	Thr	Val	Ser	Asp	Cys	Cys	Pro	Asp	Phe	Trp	Asp
				80				85						90
Phe	Cys	Leu	Gly	Val	Pro	Pro	Pro	Phe	Pro	Pro	Ile	Gln	Gly	Cys
				95				100						105
Met	His	Gly	Gly	Arg	Ile	Tyr	Pro	Val	Leu	Gly	Thr	Tyr	Trp	Asp
				110				115						120
Asn	Cys	Asn	Arg	Cys	Thr	Cys	Gln	Glu	Asn	Arg	Gln	Trp	His	Gly
				125				130						135
Gly	Ser	Arg	His	Asp	Gln	Ser	His	Gln	Pro	Gly	Gln	Leu	Trp	Leu
				140				145						150
Ala	Gly	Trp	Glu	Pro	Gln	Arg	Leu	Leu	Gly	His	Asp	Pro	Gly	
				155				160						

<210> 315
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<400> 315
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 ctgccctccc tgtggcttct cctgcttggg gggcctgcct gcctgaagac 100
 ccaggaacac cccagctgcc caggacccag ggaactggaa gccagcaaag 150
 ttgtcctcct gccagttgt cccggagctc caggaagtcc tggggagaag 200
 ggagccccag gtcctcaagg gccacctgga ccaccaggca agatggggcc 250
 caaggggtgag ccaggcccca gaaactgccg ggagctgttg agccagggcg 300
 ccaccttgag cggctggtac catctgtgcc tacctgaggg cagggccctc 350
 ccagtctttt gtgacatgga caccgagggg ggcggctggc tgggtgtttca 400
 gaggcgccag gatggttctg tggatttctt ccgctcttgg tcctcctaca 450
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 ttgcaccagc ttactctcca gggtaactgg gagctgcggg tagagctgga 550
 agactttaat ggtaaccgta ctttcgccca ctatgcgacc ttccgcctcc 600
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 tgacgctgac cacgattcaa gcaacagcaa ctgtgcagtg attgtccacg 750
 gtgcctgggt gtatgcatcc tgttaccgat caaatctcaa tggtcgctat 800
 gcagtgtctg aggctgccgc ccacaaatat ggcattgact gggcctcagg 850
 ccgtgggtgtg ggccaccct accgcagggt tcggatgatg cttcgatagg 900
 gcactctggc agccagtgcc cttatctctc ctgtacagct tccggatcgt 950
 cagccacctt gcctttgcc accacctctg cttgcctgtc cacatttaaa 1000
 aataaaatca ttttagccct ttca 1024

<210> 316
 <211> 288
 <212> PRT
 <213> Homo Sapien

<400> 316
 Met Asp Leu Leu Trp Ile Leu Pro Ser Leu Trp Leu Leu Leu Leu
 1 5 10 15
 Gly Gly Pro Ala Cys Leu Lys Thr Gln Glu His Pro Ser Cys Pro

	20	25	30
Gly Pro Arg Glu Leu Glu Ala Ser Lys Val Val Leu Leu Pro Ser	35	40	45
Cys Pro Gly Ala Pro Gly Ser Pro Gly Glu Lys Gly Ala Pro Gly	50	55	60
Pro Gln Gly Pro Pro Gly Pro Pro Gly Lys Met Gly Pro Lys Gly	65	70	75
Glu Pro Gly Pro Arg Asn Cys Arg Glu Leu Leu Ser Gln Gly Ala	80	85	90
Thr Leu Ser Gly Trp Tyr His Leu Cys Leu Pro Glu Gly Arg Ala	95	100	105
Leu Pro Val Phe Cys Asp Met Asp Thr Glu Gly Gly Gly Trp Leu	110	115	120
Val Phe Gln Arg Arg Gln Asp Gly Ser Val Asp Phe Phe Arg Ser	125	130	135
Trp Ser Ser Tyr Arg Ala Gly Phe Gly Asn Gln Glu Ser Glu Phe	140	145	150
Trp Leu Gly Asn Glu Asn Leu His Gln Leu Thr Leu Gln Gly Asn	155	160	165
Trp Glu Leu Arg Val Glu Leu Glu Asp Phe Asn Gly Asn Arg Thr	170	175	180
Phe Ala His Tyr Ala Thr Phe Arg Leu Leu Gly Glu Val Asp His	185	190	195
Tyr Gln Leu Ala Leu Gly Lys Phe Ser Glu Gly Thr Ala Gly Asp	200	205	210
Ser Leu Ser Leu His Ser Gly Arg Pro Phe Thr Thr Tyr Asp Ala	215	220	225
Asp His Asp Ser Ser Asn Ser Asn Cys Ala Val Ile Val His Gly	230	235	240
Ala Trp Trp Tyr Ala Ser Cys Tyr Arg Ser Asn Leu Asn Gly Arg	245	250	255
Tyr Ala Val Ser Glu Ala Ala Ala His Lys Tyr Gly Ile Asp Trp	260	265	270
Ala Ser Gly Arg Gly Val Gly His Pro Tyr Arg Arg Val Arg Met	275	280	285

Met Leu Arg

<210> 317
<211> 1875

<212> DNA
<213> Homo Sapien

<400> 317

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tgaagagccc gacagctaca cggaatgcac agatggctat gagtgggacc 200
cagacagcca gcactgccgg gatgtcaacg agtgtctgac catccctgag 250
gcctgcaagg gggaaatgaa gtgcatcaac cactacgggg gctacttggtg 300
cctgccccgc tccgctgccg tcatcaacga cctacatggc gagggacccc 350
cgccaccagt gcctcccgt caacacccca acccctgccc accaggctat 400
gagcccgacg atcaggacag ctgtgtggat gtggacgagt gtgcccaggc 450
cctgcacgac tgtcgcccca gccaggactg ccataacttg cctggctcct 500
atcagtgcac ctgccctgat ggttaccgca agatcggggc cgagtgtgtg 550
gacatagacg agtgccgcta ccgctactgc cagcaccgct gcgtgaacct 600
gcctggctcc ttccgctgcc agtgcgagcc gggcttccag ctggggccta 650
acaaccgctc ctgtgttgat gtgaacgagt gtgacatggg ggccccatgc 700
gagcagcgct gcttcaactc ctatgggacc ttctgtgtc gctgccacca 750
gggctatgag ctgcatcggg atggcttctc ctgcagtgat attgatgagt 800
gtagctactc cagctacctc tgtcagtacc gctgcgtcaa cgagccaggc 850
cgtttctcct gccactgccc acagggttac cagctgctgg ccacacgcct 900
ctgccaagac attgatgagt gtgagtctgg tgcgcaccag tgctccgagg 950
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acatgaccat cacctcggag cggagcgtgc ccgctgacgt gttccagatc 1150
caggcgacct ccgtctaccc cggcgcctac aatgccttctc agatccgtgc 1200
tggaactcg caggggggact ttacattag gcaaataaac aacgtcagcg 1250
ccatgctggt cctcgcccgg ccggtgacgg gccccggga gtacgtgctg 1300
gacctggaga tggtcacat gaattccctc atgagctacc gggccagctc 1350

tgtactgagg ctcaccgtct ttgtaggggc ctacaccttc tgaggagcag 1400
 gagggagcca ccctccctgc agctacccta gctgaggagc ctgttgtgag 1450
 gggcagaatg agaaaggcaa taaagggaga aagaaagtcc tgggtggctga 1500
 ggtgggaggcgc tcacactgca ggaagcctca ggctggggca ggggtggcact 1550
 tggggggggca ggccaagtgc acctaaatgg ggggtctctat atgttcaggc 1600
 ccagggggccc ccattgacag gagctgggag ctctgcacca cgagcttcag 1650
 tcaccccgag aggagaggag gtaacgagga gggcggactc caggccccgg 1700
 cccagagatt tggacttggc tggcttgcag gggtcctaag aaactccact 1750
 ctggacagcg ccaggaggcc ctgggttcca ttcctaactc tgcctcaaac 1800
 tgtacatttg gataagccct agtagttccc tgggcctgtt tttctataaa 1850
 acgaggcaac tggaaaaaaaa aaaaa 1875

<210> 318
 <211> 443
 <212> PRT
 <213> Homo Sapien

<400> 318
 Met Leu Pro Cys Ala Ser Cys Leu Pro Gly Ser Leu Leu Leu Trp
 1 5 10 15
 Ala Leu Leu Leu Leu Leu Leu Gly Ser Ala Ser Pro Gln Asp Ser
 20 25 30
 Glu Glu Pro Asp Ser Tyr Thr Glu Cys Thr Asp Gly Tyr Glu Trp
 35 40 45
 Asp Pro Asp Ser Gln His Cys Arg Asp Val Asn Glu Cys Leu Thr
 50 55 60
 Ile Pro Glu Ala Cys Lys Gly Glu Met Lys Cys Ile Asn His Tyr
 65 70 75
 Gly Gly Tyr Leu Cys Leu Pro Arg Ser Ala Ala Val Ile Asn Asp
 80 85 90
 Leu His Gly Glu Gly Pro Pro Pro Pro Val Pro Pro Ala Gln His
 95 100 105
 Pro Asn Pro Cys Pro Pro Gly Tyr Glu Pro Asp Asp Gln Asp Ser
 110 115 120
 Cys Val Asp Val Asp Glu Cys Ala Gln Ala Leu His Asp Cys Arg
 125 130 135
 Pro Ser Gln Asp Cys His Asn Leu Pro Gly Ser Tyr Gln Cys Thr
 140 145 150

Cys	Pro	Asp	Gly	Tyr	Arg	Lys	Ile	Gly	Pro	Glu	Cys	Val	Asp	Ile	155	160	165
Asp	Glu	Cys	Arg	Tyr	Arg	Tyr	Cys	Gln	His	Arg	Cys	Val	Asn	Leu	170	175	180
Pro	Gly	Ser	Phe	Arg	Cys	Gln	Cys	Glu	Pro	Gly	Phe	Gln	Leu	Gly	185	190	195
Pro	Asn	Asn	Arg	Ser	Cys	Val	Asp	Val	Asn	Glu	Cys	Asp	Met	Gly	200	205	210
Ala	Pro	Cys	Glu	Gln	Arg	Cys	Phe	Asn	Ser	Tyr	Gly	Thr	Phe	Leu	215	220	225
Cys	Arg	Cys	His	Gln	Gly	Tyr	Glu	Leu	His	Arg	Asp	Gly	Phe	Ser	230	235	240
Cys	Ser	Asp	Ile	Asp	Glu	Cys	Ser	Tyr	Ser	Ser	Tyr	Leu	Cys	Gln	245	250	255
Tyr	Arg	Cys	Val	Asn	Glu	Pro	Gly	Arg	Phe	Ser	Cys	His	Cys	Pro	260	265	270
Gln	Gly	Tyr	Gln	Leu	Leu	Ala	Thr	Arg	Leu	Cys	Gln	Asp	Ile	Asp	275	280	285
Glu	Cys	Glu	Ser	Gly	Ala	His	Gln	Cys	Ser	Glu	Ala	Gln	Thr	Cys	290	295	300
Val	Asn	Phe	His	Gly	Gly	Tyr	Arg	Cys	Val	Asp	Thr	Asn	Arg	Cys	305	310	315
Val	Glu	Pro	Tyr	Ile	Gln	Val	Ser	Glu	Asn	Arg	Cys	Leu	Cys	Pro	320	325	330
Ala	Ser	Asn	Pro	Leu	Cys	Arg	Glu	Gln	Pro	Ser	Ser	Ile	Val	His	335	340	345
Arg	Tyr	Met	Thr	Ile	Thr	Ser	Glu	Arg	Ser	Val	Pro	Ala	Asp	Val	350	355	360
Phe	Gln	Ile	Gln	Ala	Thr	Ser	Val	Tyr	Pro	Gly	Ala	Tyr	Asn	Ala	365	370	375
Phe	Gln	Ile	Arg	Ala	Gly	Asn	Ser	Gln	Gly	Asp	Phe	Tyr	Ile	Arg	380	385	390
Gln	Ile	Asn	Asn	Val	Ser	Ala	Met	Leu	Val	Leu	Ala	Arg	Pro	Val	395	400	405
Thr	Gly	Pro	Arg	Glu	Tyr	Val	Leu	Asp	Leu	Glu	Met	Val	Thr	Met	410	415	420
Asn	Ser	Leu	Met	Ser	Tyr	Arg	Ala	Ser	Ser	Val	Leu	Arg	Leu	Thr	425	430	435
Val	Phe	Val	Gly	Ala	Tyr	Thr	Phe										

<210> 319
 <211> 1266
 <212> DNA
 <213> Homo Sapien

<400> 319
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 cctctgcctc ctctcaaagg tgcgtaccca gctgtgcccg acaccatgta 100
 cctgcccctg gccacctccc cgatgcccgc tgggagtacc cctggtgctg 150
 gatggctgtg gctgctgccg ggtatgtgca cggcggctgg gggagccctg 200
 cgaccaactc cacgtctgcg acgccagcca gggcctggtc tgccagcccg 250
 gggcaggacc cgggtggccg ggggccctgt gcctcttggc agaggacgac 300
 agcagctgtg aggtgaacgg ccgcctgtat cgggaagggg agaccttcca 350
 gcccactgc agcatccgct gccgctgcga ggacggcggc ttcacctgcg 400
 tgccgctgtg cagcgaggat gtgcggctgc ccagctggga ctgccccac 450
 cccaggaggg tcgaggtcct gggcaagtgc tgccctgagt ggggtgtgcg 500
 ccaaggaggg ggactgggga cccagcccct tccagcccaa ggaccccagt 550
 tttctggcct tgtctcttcc ctgccccctg gtgtcccctg cccagaatgg 600
 agcacggcct ggggaccctg ctgcaccacc tgtgggctgg gcatggccac 650
 ccgggtgtcc aaccagaacc gcttctgccg actggagacc cagcgccgcc 700
 tgtgcctgtc caggccctgc ccaccctcca ggggtcgcag tccacaaaac 750
 agtgccttct agagccgggc tgggaatggg gacacggtgt ccaccatccc 800
 cagctggtgg ccctgtgcct gggccctggg ctgatggaag atggtccgtg 850
 cccaggccct tggctgcagg caacacttta gcttgggtcc accatgcaga 900
 acaccaatat taacacgctg cctggtctgt ctggatcccg aggtatggca 950
 gaggtgcaag acctagtccc ctttcctcta actcactgcc taggaggctg 1000
 gccaaagtgt ccagggtcct ctagccact ccctgcctac acacacagcc 1050
 tatatcaaac atgcacacgg gcgagctttc tctccgactt cccctgggca 1100
 agagatggga caagcagtcc cttaatatgg aggtgcagc aggtgctggg 1150
 ctggactggc catTTTTctg ggggtaggat gaagagaagg cacacagaga 1200
 ttctggatct cctgctgcct tttctggagt ttgtaaaatt gttcctgaat 1250

acaagcctat gcgtga 1266

<210> 320

<211> 250

<212> PRT

<213> Homo Sapien

<400> 320

Met Arg Gly Thr Pro Lys Thr His Leu Leu Ala Phe Ser Leu Leu
1 5 10 15

Cys Leu Leu Ser Lys Val Arg Thr Gln Leu Cys Pro Thr Pro Cys
20 25 30

Thr Cys Pro Trp Pro Pro Pro Arg Cys Pro Leu Gly Val Pro Leu
35 40 45

Val Leu Asp Gly Cys Gly Cys Cys Arg Val Cys Ala Arg Arg Leu
50 55 60

Gly Glu Pro Cys Asp Gln Leu His Val Cys Asp Ala Ser Gln Gly
65 70 75

Leu Val Cys Gln Pro Gly Ala Gly Pro Gly Gly Arg Gly Ala Leu
80 85 90

Cys Leu Leu Ala Glu Asp Asp Ser Ser Cys Glu Val Asn Gly Arg
95 100 105

Leu Tyr Arg Glu Gly Glu Thr Phe Gln Pro His Cys Ser Ile Arg
110 115 120

Cys Arg Cys Glu Asp Gly Gly Phe Thr Cys Val Pro Leu Cys Ser
125 130 135

Glu Asp Val Arg Leu Pro Ser Trp Asp Cys Pro His Pro Arg Arg
140 145 150

Val Glu Val Leu Gly Lys Cys Cys Pro Glu Trp Val Cys Gly Gln
155 160 165

Gly Gly Gly Leu Gly Thr Gln Pro Leu Pro Ala Gln Gly Pro Gln
170 175 180

Phe Ser Gly Leu Val Ser Ser Leu Pro Pro Gly Val Pro Cys Pro
185 190 195

Glu Trp Ser Thr Ala Trp Gly Pro Cys Ser Thr Thr Cys Gly Leu
200 205 210

Gly Met Ala Thr Arg Val Ser Asn Gln Asn Arg Phe Cys Arg Leu
215 220 225

Glu Thr Gln Arg Arg Leu Cys Leu Ser Arg Pro Cys Pro Pro Ser
230 235 240

Arg Gly Arg Ser Pro Gln Asn Ser Ala Phe
245 250

<210> 321
<211> 783
<212> DNA
<213> Homo Sapien

<400> 321
agaacctcag aaatgtgagt tatttgggaa tggctgtttg taaatgtcct 50
tacgtaagcc aagaggaggt cttgacttgg ggtcccaggg gtaccgcaga 100
tcccagggac tggagcagca ctagcaagct ctggaggatg agccaggagt 150
ctggaattga ggctgagcca aagaccccag ggccgtctca gtctcataaa 200
aggggatcag gcaggaggag tttgggagaa acctgagaag ggcctgattt 250
gcagcatcat gatgggcctc tccttggcct ctgctgtgct cctggcctcc 300
ctcctgagtc tccaccttgg aactgccaca cgtgggagtg acatatccaa 350
gacctgctgc ttccaataca gccacaagcc ccttccttgg acctgggtgc 400
gaagctatga attcaccagt aacagctgct cccagcgggc tgtgatattc 450
actacaaaaa gaggcaagaa agtctgtacc catccaagga aaaaatgggt 500
gcaaaaatac atttctttac tgaaaactcc gaaacaattg tgactcagct 550
gaattttcat ccgaggacgc ttggaccccg ctcttggctc tgcagccctc 600
tggggagcct gcggaatctt ttctgaaggc tacatggacc cgctggggag 650
gagaggggtgt ttcctcccag agttacttta ataaaggttg ttcataagagt 700
tgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 750
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 783

<210> 322
<211> 94
<212> PRT
<213> Homo Sapien

<400> 322
Met Met Gly Leu Ser Leu Ala Ser Ala Val Leu Leu Ala Ser Leu
1 5 10 15
Leu Ser Leu His Leu Gly Thr Ala Thr Arg Gly Ser Asp Ile Ser
20 25 30
Lys Thr Cys Cys Phe Gln Tyr Ser His Lys Pro Leu Pro Trp Thr
35 40 45
Trp Val Arg Ser Tyr Glu Phe Thr Ser Asn Ser Cys Ser Gln Arg
50 55 60
Ala Val Ile Phe Thr Thr Lys Arg Gly Lys Lys Val Cys Thr His
65 70 75

Pro Arg Lys Lys Trp Val Gln Lys Tyr Ile Ser Leu Leu Lys Thr
80 85 90

Pro Lys Gln Leu

<210> 323
<211> 2290
<212> DNA
<213> Homo Sapien

<400> 323
accgagccga gcggaccgaa ggcgcgccc agatgcaggt gagcaagagg 50
atgctggcgg ggggcgtgag gagcatgcc agccccctcc tggcctgctg 100
gcagcccatc ctctgctgg tgctgggctc agtgctgtca ggctcggcca 150
cgggctgccc gcccgcgtgc gagggtccc cccaggaccg cgctgtgctg 200
tgccaccgca agtgctttgt ggcagtcccc gagggcatcc ccaccgagac 250
gcgcctgctg gacctaggca agaaccgcat caaaacgctc aaccaggacg 300
agttcgccag cttcccgcac ctggaggagc tggagctcaa cgagaacatc 350
gtgagcgccg tggagcccgg cgccttcaac aacctcttca acctccggac 400
gctgggtctc cgcagcaacc gcctgaagct catcccgcta ggcgtcttca 450
ctggcctcag caacctgacc aagcaggaca tcagcgagaa caagatcggt 500
atcctactgg actacatggt tcaggacctg tacaacctca agtcactgga 550
ggttggcgac aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc 600
tcaacagcct ggagcagctg acgctggaga aatgcaacct gacctccatc 650
cccaccgagg cgctgtccca cctgcacggc ctcatcgctc tgaggctccg 700
gcacctcaac atcaatgcca tccgggacta ctcttcaag aggctgtacc 750
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cccaactgcc tctacggcct caacctgacg tccctgtcca tcacacactg 850
caatctgacc gctgtgccct acctggccgt ccgccaccta gtctatctcc 900
gcttctcaa cctctctac aaccccatca gcaccattga gggctccatg 950
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ggccgtggtg gagccctatg cctccgcgg cctcaactac ctgcgcgtgc 1050
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cgactgtcgg ctccctgtggg tgttccggcg ccgctggcgg ctcaacttca 1200
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 ttcaaggact tccctgatgt gctactgccc aactacttca cctgccgccg 1300
 cgcccgcata cgggaccgca agggccagca ggtgtttgtg gacgagggcc 1350
 acacggtgca gtttgtgtgc cgggccgatg gcgacccgcc gcccgccatc 1400
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 aggccaacag caccgcgcc actgtgcctt tccccttcga catcaagacc 1700
 ctcatcatcg ccaccaccat gggcttcata tctttcctgg gcgtcgctct 1750
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 gggcgggggg cagggaaccc cgggcggccg ggcaggggaa ggggcctggt 1950
 cgccacctgc tcaacttcca gtccttccca cctcctccct acccttctac 2000
 acacgttctc tttctccctc ccgcctccgt cccctgctgc ccccgccag 2050
 ccctcaccac ctgccctcct tctaccagga cctcagaagc ccagacctgg 2100
 ggacccacc tacacagggg cattgacaga ctggagttga aagccgacga 2150
 accgacacgc ggcagagtca ataattcaat aaaaaagtta cgaactttct 2200
 ctgtaacttg ggtttcaata attatggatt tttatgaaaa cttgaaataa 2250
 taaaaagaga aaaaaactaa aaaaaaaaaa aaaaaaaaaa 2290

<210> 324

<211> 620

<212> PRT

<213> Homo Sapien

<400> 324

Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val	Arg	Ser	Met
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Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu	Leu	Val
				20				25						30

Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro	Arg	
				35					40					45	
Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys	
				50					55					60	
Cys	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu	
				65					70					75	
Leu	Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu	
				80					85					90	
Phe	Ala	Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn	
				95					100					105	
Ile	Val	Ser	Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn	
				110					115					120	
Leu	Arg	Thr	Leu	Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro	
				125					130					135	
Leu	Gly	Val	Phe	Thr	Gly	Leu	Ser	Asn	Leu	Thr	Lys	Gln	Asp	Ile	
				140					145					150	
Ser	Glu	Asn	Lys	Ile	Val	Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp	
				155					160					165	
Leu	Tyr	Asn	Leu	Lys	Ser	Leu	Glu	Val	Gly	Asp	Asn	Asp	Leu	Val	
				170					175					180	
Tyr	Ile	Ser	His	Arg	Ala	Phe	Ser	Gly	Leu	Asn	Ser	Leu	Glu	Gln	
				185					190					195	
Leu	Thr	Leu	Glu	Lys	Cys	Asn	Leu	Thr	Ser	Ile	Pro	Thr	Glu	Ala	
				200					205					210	
Leu	Ser	His	Leu	His	Gly	Leu	Ile	Val	Leu	Arg	Leu	Arg	His	Leu	
				215					220					225	
Asn	Ile	Asn	Ala	Ile	Arg	Asp	Tyr	Ser	Phe	Lys	Arg	Leu	Tyr	Arg	
				230					235					240	
Leu	Lys	Val	Leu	Glu	Ile	Ser	His	Trp	Pro	Tyr	Leu	Asp	Thr	Met	
				245					250					255	
Thr	Pro	Asn	Cys	Leu	Tyr	Gly	Leu	Asn	Leu	Thr	Ser	Leu	Ser	Ile	
				260					265					270	
Thr	His	Cys	Asn	Leu	Thr	Ala	Val	Pro	Tyr	Leu	Ala	Val	Arg	His	
				275					280					285	
Leu	Val	Tyr	Leu	Arg	Phe	Leu	Asn	Leu	Ser	Tyr	Asn	Pro	Ile	Ser	
				290					295					300	
Thr	Ile	Glu	Gly	Ser	Met	Leu	His	Glu	Leu	Leu	Arg	Leu	Gln	Glu	
				305					310					315	
Ile	Gln	Leu	Val	Gly	Gly	Gln	Leu	Ala	Val	Val	Glu	Pro	Tyr	Ala	

				320						325					330
Phe	Arg	Gly	Leu	Asn	Tyr	Leu	Arg	Val	Leu	Asn	Val	Ser	Gly	Asn	
				335					340					345	
Gln	Leu	Thr	Thr	Leu	Glu	Glu	Ser	Val	Phe	His	Ser	Val	Gly	Asn	
				350					355					360	
Leu	Glu	Thr	Leu	Ile	Leu	Asp	Ser	Asn	Pro	Leu	Ala	Cys	Asp	Cys	
				365					370					375	
Arg	Leu	Leu	Trp	Val	Phe	Arg	Arg	Arg	Trp	Arg	Leu	Asn	Phe	Asn	
				380					385					390	
Arg	Gln	Gln	Pro	Thr	Cys	Ala	Thr	Pro	Glu	Phe	Val	Gln	Gly	Lys	
				395					400					405	
Glu	Phe	Lys	Asp	Phe	Pro	Asp	Val	Leu	Leu	Pro	Asn	Tyr	Phe	Thr	
				410					415					420	
Cys	Arg	Arg	Ala	Arg	Ile	Arg	Asp	Arg	Lys	Ala	Gln	Gln	Val	Phe	
				425					430					435	
Val	Asp	Glu	Gly	His	Thr	Val	Gln	Phe	Val	Cys	Arg	Ala	Asp	Gly	
				440					445					450	
Asp	Pro	Pro	Pro	Ala	Ile	Leu	Trp	Leu	Ser	Pro	Arg	Lys	His	Leu	
				455					460					465	
Val	Ser	Ala	Lys	Ser	Asn	Gly	Arg	Leu	Thr	Val	Phe	Pro	Asp	Gly	
				470					475					480	
Thr	Leu	Glu	Val	Arg	Tyr	Ala	Gln	Val	Gln	Asp	Asn	Gly	Thr	Tyr	
				485					490					495	
Leu	Cys	Ile	Ala	Ala	Asn	Ala	Gly	Gly	Asn	Asp	Ser	Met	Pro	Ala	
				500					505					510	
His	Leu	His	Val	Arg	Ser	Tyr	Ser	Pro	Asp	Trp	Pro	His	Gln	Pro	
				515					520					525	
Asn	Lys	Thr	Phe	Ala	Phe	Ile	Ser	Asn	Gln	Pro	Gly	Glu	Gly	Glu	
				530					535					540	
Ala	Asn	Ser	Thr	Arg	Ala	Thr	Val	Pro	Phe	Pro	Phe	Asp	Ile	Lys	
				545					550					555	
Thr	Leu	Ile	Ile	Ala	Thr	Thr	Met	Gly	Phe	Ile	Ser	Phe	Leu	Gly	
				560					565					570	
Val	Val	Leu	Phe	Cys	Leu	Val	Leu	Leu	Phe	Leu	Trp	Ser	Arg	Gly	
				575					580					585	
Lys	Gly	Asn	Thr	Lys	His	Asn	Ile	Glu	Ile	Glu	Tyr	Val	Pro	Arg	
				590					595					600	
Lys	Ser	Asp	Ala	Gly	Ile	Ser	Ser	Ala	Asp	Ala	Pro	Arg	Lys	Phe	
				605					610					615	

Asn Met Lys Met Ile
620

<210> 325
<211> 1670
<212> DNA
<213> Homo Sapien

<400> 325
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agaggcagga gctggaaagg agagagggag gaggaggagg agatgcggga 200
tggagacctg gagttaggtg gcttgggaga gcttaatgaa aagagaacgg 250
agaggaggtg tgggttagga accaagaggt agccctgtgg gcagcagaag 300
gctgagagga gtaggaagat caggagctag agggagactg gagggttccg 350
ggaaaagagc agaggaaaga ggaaagacac agagagacgg gagagagaag 400
aagagtgggt ttgaagggcg gatctcagtc cctggctgct ttggcatttg 450
gggaactggg actccctgtg gggaggagag gaaagctgga agtcctggag 500
ggacagggtc ccagaaggag gggacagagg agctgagaga ggggggcagg 550
gcgttgggca ggggtccctc ggaggcctcc tggggatggg ggctgcagct 600
cgtctgagcg cccctcgagc gctggtactc tgggctgcac tgggggcagc 650
agctcacatc ggaccagcac ctgaccccga ggactggtgg agctacaagg 700
ataatctcca gggaaacttc gtgccagggc ctcttttctg gggcctggtg 750
aatgcagcgt ggagtctgtg tgctgtgggg aagcggcaga gccccgtgga 800
tgtggagctg aagagggttc tttatgacct ctttctgccc ccattaaggc 850
tcagcactgg aggagagaag ctccggggaa ccttgtacaa caccggccga 900
catgtctcct tcctgcctgc accccgacct gtggtcaatg tgtctggagg 950
tcccctcctt tacagccacc gactcagtga actgcggctg ctgtttggag 1000
ctcgcgacgg agccggctcg gaacatcaga tcaaccacca gggcttctct 1050
gctgaggtgc agctcattca cttcaaccag gaactctacg ggaatttcag 1100
cgctgcctcc cgcgggccca atggcctggc cattctcagc ctctttgtca 1150
acgttgccag tacctctaac ccattcctca gtcgcctcct taaccgcgac 1200
accatcactc gcatctccta caagaatgat gcctactttc ttcaagacct 1250

gagcctggag ctctgttcc ctgaatcctt cggcttcac acctatcagg 1300
gctctctcag caccctgccc tgctccgaga ctgtcacctg gatcctcatt 1350
gaccgggccc tcaatatac ctcccttcag atgcactccc tgagactcct 1400
gagccagaat cctccatctc agatcttcca gagcctcagc ggtaacagcc 1450
ggcccctgca gcccttggcc cacagggcac tgaggggcaa cagggacccc 1500
cggcaccccc agaggcgctg ccgaggcccc aactaccgcc tgcattgtga 1550
tggtgtcccc catggtcgct gagactcccc ttcgaggatt gcacccgccc 1600
gtcctaagcc tccccacaag gcgaggggag ttaccctaa aacaaagcta 1650
ttaaaggac agaatactta 1670

<210> 326

<211> 328

<212> PRT

<213> Homo Sapien

<400> 326

Met	Gly	Ala	Ala	Ala	Arg	Leu	Ser	Ala	Pro	Arg	Ala	Leu	Val	Leu	1	5	10	15
Trp	Ala	Ala	Leu	Gly	Ala	Ala	Ala	His	Ile	Gly	Pro	Ala	Pro	Asp	20	25	30	
Pro	Glu	Asp	Trp	Trp	Ser	Tyr	Lys	Asp	Asn	Leu	Gln	Gly	Asn	Phe	35	40	45	
Val	Pro	Gly	Pro	Pro	Phe	Trp	Gly	Leu	Val	Asn	Ala	Ala	Trp	Ser	50	55	60	
Leu	Cys	Ala	Val	Gly	Lys	Arg	Gln	Ser	Pro	Val	Asp	Val	Glu	Leu	65	70	75	
Lys	Arg	Val	Leu	Tyr	Asp	Pro	Phe	Leu	Pro	Pro	Leu	Arg	Leu	Ser	80	85	90	
Thr	Gly	Gly	Glu	Lys	Leu	Arg	Gly	Thr	Leu	Tyr	Asn	Thr	Gly	Arg	95	100	105	
His	Val	Ser	Phe	Leu	Pro	Ala	Pro	Arg	Pro	Val	Val	Asn	Val	Ser	110	115	120	
Gly	Gly	Pro	Leu	Leu	Tyr	Ser	His	Arg	Leu	Ser	Glu	Leu	Arg	Leu	125	130	135	
Leu	Phe	Gly	Ala	Arg	Asp	Gly	Ala	Gly	Ser	Glu	His	Gln	Ile	Asn	140	145	150	
His	Gln	Gly	Phe	Ser	Ala	Glu	Val	Gln	Leu	Ile	His	Phe	Asn	Gln	155	160	165	
Glu	Leu	Tyr	Gly	Asn	Phe	Ser	Ala	Ala	Ser	Arg	Gly	Pro	Asn	Gly				

	170		175		180
Leu Ala Ile Leu Ser Leu Phe Val Asn	Val Ala Ser Thr Ser Asn				
185	190				195
Pro Phe Leu Ser Arg Leu Leu Asn Arg	Asp Thr Ile Thr Arg Ile				
200	205				210
Ser Tyr Lys Asn Asp Ala Tyr Phe Leu	Gln Asp Leu Ser Leu Glu				
215	220				225
Leu Leu Phe Pro Glu Ser Phe Gly Phe	Ile Thr Tyr Gln Gly Ser				
230	235				240
Leu Ser Thr Pro Pro Cys Ser Glu Thr	Val Thr Trp Ile Leu Ile				
245	250				255
Asp Arg Ala Leu Asn Ile Thr Ser Leu	Gln Met His Ser Leu Arg				
260	265				270
Leu Leu Ser Gln Asn Pro Pro Ser Gln	Ile Phe Gln Ser Leu Ser				
275	280				285
Gly Asn Ser Arg Pro Leu Gln Pro Leu	Ala His Arg Ala Leu Arg				
290	295				300
Gly Asn Arg Asp Pro Arg His Pro Glu	Arg Arg Cys Arg Gly Pro				
305	310				315
Asn Tyr Arg Leu His Val Asp Gly Val	Pro His Gly Arg				
320	325				

<210> 327
 <211> 2454
 <212> DNA
 <213> Homo Sapien

<400> 327
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 ctcatctttt cttcttacac agtgtctgag aacatttaca ttatagataa 150
 gtagtacatg gtggataact tctactttta ggaggactac tctcttctga 200
 cagtcctaga ctggtcttct acactaagac accatgaagg agtatgtgct 250
 cctattattc ctggctttgt gctctgcaa acccttcttt agcccttcac 300
 acatcgact gaagaatatg atgctgaagg atatggaaga cacagatgat 350
 gatgatgatg atgatgatga tgatgatgat gatgaggaca actctctttt 400
 tccaacaaga gagccaagaa gccatttttt tccatttgat ctgtttccaa 450
 tgtgtccatt tggatgtcag tgctattcac gagttgtaca ttgctcagat 500

ttaggtttga cctcagtccc aaccaacatt ccatttgata ctcgaatgct 550
 tgatcttcaa aacaataaaa ttaaggaaat caaagaaaat gatttttaaag 600
 gactcacttc actttatggt ctgatcctga acaacaacaa gctaacgaag 650
 attcacccaa aagcctttct aaccacaaag aagttgcgaa ggctgtatct 700
 gtcccacaat caactaagtg aaataccact taatcttccc aaatcattag 750
 cagaactcag aattcatgaa aataaagtta agaaaataca aaaggacaca 800
 ttcaaaggaa tgaatgcttt acacgttttg gaaatgagtg caaacctct 850
 tgataataat gggatagagc caggggcatt tgaaggggtg acggtgttcc 900
 atatcagaat tgcagaagca aaactgacct cagttcctaa aggcttacca 950
 ccaactttat tggagcttca cttagattat aataaaattt caacagtgga 1000
 acttgaggat tttaaacgat acaaagaact acaaaggctg ggcctaggaa 1050
 acaacaaaat cacagatatc gaaaatggga gtcttgctaa cataccacgt 1100
 gtgagagaaa tacatttgga aaacaataaa ctaaaaaaaaaa tcccttcagg 1150
 attaccagag ttgaaatacc tccagataat cttccttcat tctaattcaa 1200
 ttgcaagagt gggagtaa at gacttctgtc caacagtgcc aaagatgaag 1250
 aaatctttat acagtgcaat aagtttattc aacaaccggt tgaaatactg 1300
 ggaaatgcaa cctgcaacat ttcgttgtgt tttgagcaga atgagtgttc 1350
 agcttgggaa ctttggaatg taataattag taattggtaa tgtccattta 1400
 atataagatt caaaaatccc tacatttgga atacttgaac tctattaata 1450
 atggtagtat tatatatata agcaaataatc tattctcaag tggtaagtcc 1500
 actgacttat tttatgacaa gaaatttcaa cggaattttg ccaaactatt 1550
 gatacataag gggttgagag aaacaagcat ctattgcagt ttcctttttg 1600
 cgtacaaatg atcttacata aatctcatgc ttgaccattc ctttcttcat 1650
 aacaaaaaag taagatattc ggtatttaac actttgttat caagcacatt 1700
 ttaaaaagaa ctgtactgta aatggaatgc ttgacttagc aaaatttgtg 1750
 ctctttcatt tgctgttaga aaaacagaat taacaaagac agtaatgtga 1800
 agagtgcatt acactattct tattcttttag taacttgggt agtactgtaa 1850
 tatttttaat catcttaaag tatgatttga tataatctta ttgaaattac 1900
 cttatcatgt cttagagccc gtctttatgt ttaaaactaa tttcttaaaa 1950

taaagccttc agtaaagtgt cattaccaac ttgataaatg ctactcataa 2000
 gagctgggtt ggggctatag catatgcttt ttttttttta attattacct 2050
 gatttaaaaa tctctgtaaa aacgtgtagt gtttcataaa atctgtaact 2100
 cgcattttta tgatccgcta ttataagctt ttaatagcat gaaaattggt 2150
 aggctatata acattgccac ttcaactcta aggaatattt ttgagatatc 2200
 cctttggaag accttgcttg gaagagcctg gacactaaca attctacacc 2250
 aaattgtctc ttcaaatacg tatggactgg ataactctga gaaacacatc 2300
 tagtataact gaataagcag agcatcaaat taaacagaca gaaaccgaaa 2350
 gctctatata aatgctcaga gttctttatg tatttcttat tggcattcaa 2400
 catatgtaaa atcagaaaac agggaaattt tcattaataaa tattggtttg 2450
 aaat 2454

<210> 328
 <211> 379
 <212> PRT
 <213> Homo Sapien

<400> 328
 Met Lys Glu Tyr Val Leu Leu Leu Phe Leu Ala Leu Cys Ser Ala
 1 5 10 15
 Lys Pro Phe Phe Ser Pro Ser His Ile Ala Leu Lys Asn Met Met
 20 25 30
 Leu Lys Asp Met Glu Asp Thr Asp Asp Asp Asp Asp Asp Asp
 35 40 45
 Asp Asp Asp Asp Asp Glu Asp Asn Ser Leu Phe Pro Thr Arg Glu
 50 55 60
 Pro Arg Ser His Phe Phe Pro Phe Asp Leu Phe Pro Met Cys Pro
 65 70 75
 Phe Gly Cys Gln Cys Tyr Ser Arg Val Val His Cys Ser Asp Leu
 80 85 90
 Gly Leu Thr Ser Val Pro Thr Asn Ile Pro Phe Asp Thr Arg Met
 95 100 105
 Leu Asp Leu Gln Asn Asn Lys Ile Lys Glu Ile Lys Glu Asn Asp
 110 115 120
 Phe Lys Gly Leu Thr Ser Leu Tyr Gly Leu Ile Leu Asn Asn Asn
 125 130 135
 Lys Leu Thr Lys Ile His Pro Lys Ala Phe Leu Thr Thr Lys Lys
 140 145 150

Leu	Arg	Arg	Leu	Tyr	Leu	Ser	His	Asn	Gln	Leu	Ser	Glu	Ile	Pro
				155					160					165
Leu	Asn	Leu	Pro	Lys	Ser	Leu	Ala	Glu	Leu	Arg	Ile	His	Glu	Asn
				170					175					180
Lys	Val	Lys	Lys	Ile	Gln	Lys	Asp	Thr	Phe	Lys	Gly	Met	Asn	Ala
				185					190					195
Leu	His	Val	Leu	Glu	Met	Ser	Ala	Asn	Pro	Leu	Asp	Asn	Asn	Gly
				200					205					210
Ile	Glu	Pro	Gly	Ala	Phe	Glu	Gly	Val	Thr	Val	Phe	His	Ile	Arg
				215					220					225
Ile	Ala	Glu	Ala	Lys	Leu	Thr	Ser	Val	Pro	Lys	Gly	Leu	Pro	Pro
				230					235					240
Thr	Leu	Leu	Glu	Leu	His	Leu	Asp	Tyr	Asn	Lys	Ile	Ser	Thr	Val
				245					250					255
Glu	Leu	Glu	Asp	Phe	Lys	Arg	Tyr	Lys	Glu	Leu	Gln	Arg	Leu	Gly
				260					265					270
Leu	Gly	Asn	Asn	Lys	Ile	Thr	Asp	Ile	Glu	Asn	Gly	Ser	Leu	Ala
				275					280					285
Asn	Ile	Pro	Arg	Val	Arg	Glu	Ile	His	Leu	Glu	Asn	Asn	Lys	Leu
				290					295					300
Lys	Lys	Ile	Pro	Ser	Gly	Leu	Pro	Glu	Leu	Lys	Tyr	Leu	Gln	Ile
				305					310					315
Ile	Phe	Leu	His	Ser	Asn	Ser	Ile	Ala	Arg	Val	Gly	Val	Asn	Asp
				320					325					330
Phe	Cys	Pro	Thr	Val	Pro	Lys	Met	Lys	Lys	Ser	Leu	Tyr	Ser	Ala
				335					340					345
Ile	Ser	Leu	Phe	Asn	Asn	Pro	Val	Lys	Tyr	Trp	Glu	Met	Gln	Pro
				350					355					360
Ala	Thr	Phe	Arg	Cys	Val	Leu	Ser	Arg	Met	Ser	Val	Gln	Leu	Gly
				365					370					375

Asn Phe Gly Met

<210> 329
 <211> 1514
 <212> DNA
 <213> Homo Sapien

<400> 329
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 ctggatgtac gcatccgcag gttcccgcgg acttgggggc gcccgctgag 100

ccccgccgcc cgcagaagac ttgtgtttgc ctctgcagc ctcaaccgg 150
 agggcagcga gggcctacca ccatgatcac tgggtgtgttc agcatgcgct 200
 tgtggacccc agtgggcgtc ctgacctcgc tggcgactg cctgcaccag 250
 cggcgggtgg ccctggccga gctgcaggag gccgatggcc agtgtccggt 300
 cgaccgcagc ctgctgaagt tgaaaatggg gcaggtcgtg tttcgacacg 350
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 accatgagac caccctgaag gggggcatgt ttgctgggca gctgaccaag 550
 gtgggcatgc agcaaagtgt tgccttggga gagagactga ggaagaacta 600
 tgtggaagac attccctttc tttcaccaac cttcaacca caggaggtct 650
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 ctggctgggc ttttccagtg tcagaaagaa ggacccatca tcatccacac 750
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 aggcacacaa cctcccaagc tgcccatgc tgaagagatt tgcacggatg 1000
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 cagggaagt cttcagatgg cagtaggccc attcctccac atcctagaga 1100
 gcaacctgct gaaagccatg gactctgcca ctgccccga caagatcaga 1150
 aagctgtatc tctatgcggc tcatgatgtg accttcatac cgctcttaat 1200
 gaccctgggg atttttgacc acaaattggc accgtttgct gttgacctga 1250
 ccatggaact ttaccagcac ctggaatcta aggagtgggt tgtgcagctc 1300
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 cccgctggac atgttcttga atgccatgtc agtttatacc ttaagcccag 1400
 aaaaatacca tgcactctgc tctcaaactc aggtgatgga agttggaaat 1450
 gaagagtaac tgatttataa aagcaggatg tgttgatttt aaaataaagt 1500
 gcctttatac aatg 1514

<210> 330
 <211> 428
 <212> PRT
 <213> Homo Sapien

<400> 330

Met	Ile	Thr	Gly	Val	Phe	Ser	Met	Arg	Leu	Trp	Thr	Pro	Val	Gly	1	5	10	15
Val	Leu	Thr	Ser	Leu	Ala	Tyr	Cys	Leu	His	Gln	Arg	Arg	Val	Ala	20	25	30	
Leu	Ala	Glu	Leu	Gln	Glu	Ala	Asp	Gly	Gln	Cys	Pro	Val	Asp	Arg	35	40	45	
Ser	Leu	Leu	Lys	Leu	Lys	Met	Val	Gln	Val	Val	Phe	Arg	His	Gly	50	55	60	
Ala	Arg	Ser	Pro	Leu	Lys	Pro	Leu	Pro	Leu	Glu	Glu	Gln	Val	Glu	65	70	75	
Trp	Asn	Pro	Gln	Leu	Leu	Glu	Val	Pro	Pro	Gln	Thr	Gln	Phe	Asp	80	85	90	
Tyr	Thr	Val	Thr	Asn	Leu	Ala	Gly	Gly	Pro	Lys	Pro	Tyr	Ser	Pro	95	100	105	
Tyr	Asp	Ser	Gln	Tyr	His	Glu	Thr	Thr	Leu	Lys	Gly	Gly	Met	Phe	110	115	120	
Ala	Gly	Gln	Leu	Thr	Lys	Val	Gly	Met	Gln	Gln	Met	Phe	Ala	Leu	125	130	135	
Gly	Glu	Arg	Leu	Arg	Lys	Asn	Tyr	Val	Glu	Asp	Ile	Pro	Phe	Leu	140	145	150	
Ser	Pro	Thr	Phe	Asn	Pro	Gln	Glu	Val	Phe	Ile	Arg	Ser	Thr	Asn	155	160	165	
Ile	Phe	Arg	Asn	Leu	Glu	Ser	Thr	Arg	Cys	Leu	Leu	Ala	Gly	Leu	170	175	180	
Phe	Gln	Cys	Gln	Lys	Glu	Gly	Pro	Ile	Ile	Ile	His	Thr	Asp	Glu	185	190	195	
Ala	Asp	Ser	Glu	Val	Leu	Tyr	Pro	Asn	Tyr	Gln	Ser	Cys	Trp	Ser	200	205	210	
Leu	Arg	Gln	Arg	Thr	Arg	Gly	Arg	Arg	Gln	Thr	Ala	Ser	Leu	Gln	215	220	225	
Pro	Gly	Ile	Ser	Glu	Asp	Leu	Lys	Lys	Val	Lys	Asp	Arg	Met	Gly	230	235	240	
Ile	Asp	Ser	Ser	Asp	Lys	Val	Asp	Phe	Phe	Ile	Leu	Leu	Asp	Asn	245	250	255	
Val	Ala	Ala	Glu	Gln	Ala	His	Asn	Leu	Pro	Ser	Cys	Pro	Met	Leu				

	260	265	270
Lys Arg Phe Ala Arg Met Ile Glu Gln Arg Ala Val Asp Thr Ser	275	280	285
Leu Tyr Ile Leu Pro Lys Glu Asp Arg Glu Ser Leu Gln Met Ala	290	295	300
Val Gly Pro Phe Leu His Ile Leu Glu Ser Asn Leu Leu Lys Ala	305	310	315
Met Asp Ser Ala Thr Ala Pro Asp Lys Ile Arg Lys Leu Tyr Leu	320	325	330
Tyr Ala Ala His Asp Val Thr Phe Ile Pro Leu Leu Met Thr Leu	335	340	345
Gly Ile Phe Asp His Lys Trp Pro Pro Phe Ala Val Asp Leu Thr	350	355	360
Met Glu Leu Tyr Gln His Leu Glu Ser Lys Glu Trp Phe Val Gln	365	370	375
Leu Tyr Tyr His Gly Lys Glu Gln Val Pro Arg Gly Cys Pro Asp	380	385	390
Gly Leu Cys Pro Leu Asp Met Phe Leu Asn Ala Met Ser Val Tyr	395	400	405
Thr Leu Ser Pro Glu Lys Tyr His Ala Leu Cys Ser Gln Thr Gln	410	415	420
Val Met Glu Val Gly Asn Glu Glu	425		

<210> 331
 <211> 2477
 <212> DNA
 <213> Homo Sapien

<400> 331
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 agctagtgat caggggttct tcttgctgga gaagaaaggg ctgagggcag 150
 agcagggcac tctcactcag ggtgaccagc tccttgccctc tctgtggata 200
 acagagcatg agaaagtga gagatgcagc ggagtgaagt gatggaagtc 250
 taaaatagga aggaattttg tgtgcaatat cagactctgg gagcagttga 300
 cctggagagc ctgggggagg gcctgcctaa caagctttca aaaaacagga 350
 gcgacttcca ctgggctggg ataagacgtg ccggtaggat agggaagact 400
 gggtttagtc ctaatatcaa attgactggc tgggtgaact tcaacagcct 450

tttAACctct ctgggagatg aaaacgatgg cttaaggggc cagaaataga 500
 gatgctttgt aaaataaaat tttaaaaaaa gcaagtatTTT tatagcataa 550
 aggctagaga ccaaaataga taacaggatt ccctgaacat tcctaagagg 600
 gagaaagtat gttaaaaata gaaaaaccaa aatgcagaag gaggagactc 650
 acagagctaa accaggatgg ggaccctggg tcaggccagc ctctttgctc 700
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 tgggtgctgc tggccccccc agcagccggc atgcctcagt tcagcacctt 950
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 ggacgggggc cgtctatgtg ggggccatca accgggtcta taagctgaca 1050
 ggcaacctga ccatccaggt ggctcataag acagggccag aagaggacaa 1100
 caagtctcgt taccgcgcc tcatcgtgca gccctgcagc gaagtgtca 1150
 ccctcaccaa caatgtcaac aagctgtca tcattgacta ctctgagaac 1200
 cgctgctgg cctgtgggag cctctaccag ggggtctgca agctgctgcg 1250
 gctggatgac ctcttcatcc tggTggagcc atcccacaag aaggagcact 1300
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 tctgagggtg aggatggcaa gctcttcatc ggcacggctg tggatgggaa 1400
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 cttctacatc tacggctttg ctagtggggg ctttgtctac tttctactg 1600
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 tacaccacca gcagggaccg catgacctct gtggcctcct acgtttacaa 2150
 cggctacagc gtggtttttg tggggactaa gagtggcaag ctgaaaaagg 2200
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<210> 332

<211> 552

<212> PRT

<213> Homo Sapien

<400> 332

Met	Gly	Thr	Leu	Gly	Gln	Ala	Ser	Leu	Phe	Ala	Pro	Pro	Gly	Asn
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Tyr	Phe	Trp	Ser	Asp	His	Ser	Ala	Leu	Cys	Phe	Ala	Glu	Ser	Cys
				20					25					30
Glu	Gly	Gln	Pro	Gly	Lys	Val	Glu	Gln	Met	Ser	Thr	His	Arg	Ser
				35					40					45
Arg	Leu	Leu	Thr	Ala	Ala	Pro	Leu	Ser	Met	Glu	Gln	Arg	Gln	Pro
				50					55					60
Trp	Pro	Arg	Ala	Leu	Glu	Val	Asp	Ser	Arg	Ser	Val	Val	Leu	Leu
				65					70					75
Ser	Val	Val	Trp	Val	Leu	Leu	Ala	Pro	Pro	Ala	Ala	Gly	Met	Pro
				80					85					90
Gln	Phe	Ser	Thr	Phe	His	Ser	Glu	Asn	Arg	Asp	Trp	Thr	Phe	Asn
				95					100					105
His	Leu	Thr	Val	His	Gln	Gly	Thr	Gly	Ala	Val	Tyr	Val	Gly	Ala
				110					115					120
Ile	Asn	Arg	Val	Tyr	Lys	Leu	Thr	Gly	Asn	Leu	Thr	Ile	Gln	Val
				125					130					135
Ala	His	Lys	Thr	Gly	Pro	Glu	Glu	Asp	Asn	Lys	Ser	Arg	Tyr	Pro

Pro	Leu	Ile	Val	Gln	Pro	Cys	Ser	Glu	Val	Leu	Thr	Leu	Thr	Asn
				155					160					165
Asn	Val	Asn	Lys	Leu	Leu	Ile	Ile	Asp	Tyr	Ser	Glu	Asn	Arg	Leu
				170					175					180
Leu	Ala	Cys	Gly	Ser	Leu	Tyr	Gln	Gly	Val	Cys	Lys	Leu	Leu	Arg
				185					190					195
Leu	Asp	Asp	Leu	Phe	Ile	Leu	Val	Glu	Pro	Ser	His	Lys	Lys	Glu
				200					205					210
His	Tyr	Leu	Ser	Ser	Val	Asn	Lys	Thr	Gly	Thr	Met	Tyr	Gly	Val
				215					220					225
Ile	Val	Arg	Ser	Glu	Gly	Glu	Asp	Gly	Lys	Leu	Phe	Ile	Gly	Thr
				230					235					240
Ala	Val	Asp	Gly	Lys	Gln	Asp	Tyr	Phe	Pro	Thr	Leu	Ser	Ser	Arg
				245					250					255
Lys	Leu	Pro	Arg	Asp	Pro	Glu	Ser	Ser	Ala	Met	Leu	Asp	Tyr	Glu
				260					265					270
Leu	His	Ser	Asp	Phe	Val	Ser	Ser	Leu	Ile	Lys	Ile	Pro	Ser	Asp
				275					280					285
Thr	Leu	Ala	Leu	Val	Ser	His	Phe	Asp	Ile	Phe	Tyr	Ile	Tyr	Gly
				290					295					300
Phe	Ala	Ser	Gly	Gly	Phe	Val	Tyr	Phe	Leu	Thr	Val	Gln	Pro	Glu
				305					310					315
Thr	Pro	Glu	Gly	Val	Ala	Ile	Asn	Ser	Ala	Gly	Asp	Leu	Phe	Tyr
				320					325					330
Thr	Ser	Arg	Ile	Val	Arg	Leu	Cys	Lys	Asp	Asp	Pro	Lys	Phe	His
				335					340					345
Ser	Tyr	Val	Ser	Leu	Pro	Phe	Gly	Cys	Thr	Arg	Ala	Gly	Val	Glu
				350					355					360
Tyr	Arg	Leu	Leu	Gln	Ala	Ala	Tyr	Leu	Ala	Lys	Pro	Gly	Asp	Ser
				365					370					375
Leu	Ala	Gln	Ala	Phe	Asn	Ile	Thr	Ser	Gln	Asp	Asp	Val	Leu	Phe
				380					385					390
Ala	Ile	Phe	Ser	Lys	Gly	Gln	Lys	Gln	Tyr	His	His	Pro	Pro	Asp
				395					400					405
Asp	Ser	Ala	Leu	Cys	Ala	Phe	Pro	Ile	Arg	Ala	Ile	Asn	Leu	Gln
				410					415					420
Ile	Lys	Glu	Arg	Leu	Gln	Ser	Cys	Tyr	Gln	Gly	Glu	Gly	Asn	Leu
				425					430					435

Glu	Leu	Asn	Trp	Leu	Leu	Gly	Lys	Asp	Val	Gln	Cys	Thr	Lys	Ala	
				440					445					450	
Pro	Val	Pro	Ile	Asp	Asp	Asn	Phe	Cys	Gly	Leu	Asp	Ile	Asn	Gln	
				455					460					465	
Pro	Leu	Gly	Gly	Ser	Thr	Pro	Val	Glu	Gly	Leu	Thr	Leu	Tyr	Thr	
				470					475					480	
Thr	Ser	Arg	Asp	Arg	Met	Thr	Ser	Val	Ala	Ser	Tyr	Val	Tyr	Asn	
				485					490					495	
Gly	Tyr	Ser	Val	Val	Phe	Val	Gly	Thr	Lys	Ser	Gly	Lys	Leu	Lys	
				500					505					510	
Lys	Val	Arg	Val	Tyr	Glu	Phe	Arg	Cys	Ser	Asn	Ala	Ile	His	Leu	
				515					520					525	
Leu	Ser	Lys	Glu	Ser	Leu	Leu	Glu	Gly	Ser	Tyr	Trp	Trp	Arg	Phe	
				530					535					540	
Asn	Tyr	Arg	Gln	Leu	Tyr	Phe	Leu	Gly	Glu	Gln	Arg				
				545					550						

<210> 333
 <211> 1520
 <212> DNA
 <213> Homo Sapien

<400> 333
 gctgagtctg ctgctcctgc tgctgctgct ccagcctgta acctgtgcct 50
 acaccacgcc agggcccccc agagccctca ccacgctggg cgccccaga 100
 gccacacca tgccgggcac ctacgctccc tcgaccacac tcagtagtcc 150
 cagcaccag ggctgcaag agcaggcacg ggccctgatg cgggacttcc 200
 cgctcgtgga cggccacaac gacctgcccc tggctcctaag gcaggtttac 250
 cagaaagggc tacaggatgt taacctgcgc aatttcagct acggccagac 300
 cagcctggac aggcttagag atggcctcgt gggcgcccag ttctggtcag 350
 cctatgtgcc atgccagacc caggaccggg atgccctgcg cctcaccctg 400
 gagcagattg acctcatagc ccgcatgtgt gcctcctatt ctgagctgga 450
 gcttgtgacc tcggctaaag ctctgaacga cactcagaaa ttggcctgcc 500
 tcatcggtgt agagggtggc cactcgctgg acaatagcct ctccatctta 550
 cgtaccttct acatgctggg agtgcgctac ctgacgctca cccacacctg 600
 caacacaccc tgggcagaga gctccgctaa gggcgccac tccttctaca 650
 acaacatcag cgggctgact gactttggtg agaagggtggt ggcagaaatg 700

aaccgcctgg gcatgatggt agacttatcc catgtctcag atgctgtggc 750
acggcggggc ctggaagtgt cacaggcacc tgtgatcttc tcccactcgg 800
ctgcccgggg tgtgtgcaac agtgctcgga atgttcctga tgacatcctg 850
cagcttctga agaagaacgg tggcgtcgtg atggtgtctt tgtccatggg 900
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tcgaccacat caaggctgtc attggatcca agttcatcgg gattgggtgga 1000
gattatgatg gggccggcaa attccctcag gggctggaag acgtgtccac 1050
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agcttcaggg tgctcttcgt ggaaacctgc tgcgggtctt cagacaagtg 1150
gaaaaggtac aggaagaaaa caaatggcaa agccccttgg aggacaagtt 1200
cccggatgag cagctgagca gttcctgcca ctccgacctc tcacgtctgc 1250
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ccacatggcc ccagtccttg cagttgtggc caccttccca gtccttattc 1400
tgtggctctg atgaccagc tagtcctgcc agatgtcact gtagcaagcc 1450
acagacaccc cacaagttc ccctgttgtg caggcacaaa tatttcctga 1500
aataaatggt ttggacatag 1520

<210> 334
<211> 433
<212> PRT
<213> Homo Sapien

<400> 334
Met Pro Gly Thr Tyr Ala Pro Ser Thr Thr Leu Ser Ser Pro Ser
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Thr Gln Gly Leu Gln Glu Gln Ala Arg Ala Leu Met Arg Asp Phe
20 25 30
Pro Leu Val Asp Gly His Asn Asp Leu Pro Leu Val Leu Arg Gln
35 40 45
Val Tyr Gln Lys Gly Leu Gln Asp Val Asn Leu Arg Asn Phe Ser
50 55 60
Tyr Gly Gln Thr Ser Leu Asp Arg Leu Arg Asp Gly Leu Val Gly
65 70 75
Ala Gln Phe Trp Ser Ala Tyr Val Pro Cys Gln Thr Gln Asp Arg
80 85 90

Asp	Ala	Leu	Arg	Leu	Thr	Leu	Glu	Gln	Ile	Asp	Leu	Ile	Arg	Arg	
				95					100					105	
Met	Cys	Ala	Ser	Tyr	Ser	Glu	Leu	Glu	Leu	Val	Thr	Ser	Ala	Lys	
				110					115					120	
Ala	Leu	Asn	Asp	Thr	Gln	Lys	Leu	Ala	Cys	Leu	Ile	Gly	Val	Glu	
				125					130					135	
Gly	Gly	His	Ser	Leu	Asp	Asn	Ser	Leu	Ser	Ile	Leu	Arg	Thr	Phe	
				140					145					150	
Tyr	Met	Leu	Gly	Val	Arg	Tyr	Leu	Thr	Leu	Thr	His	Thr	Cys	Asn	
				155					160					165	
Thr	Pro	Trp	Ala	Glu	Ser	Ser	Ala	Lys	Gly	Val	His	Ser	Phe	Tyr	
				170					175					180	
Asn	Asn	Ile	Ser	Gly	Leu	Thr	Asp	Phe	Gly	Glu	Lys	Val	Val	Ala	
				185					190					195	
Glu	Met	Asn	Arg	Leu	Gly	Met	Met	Val	Asp	Leu	Ser	His	Val	Ser	
				200					205					210	
Asp	Ala	Val	Ala	Arg	Arg	Ala	Leu	Glu	Val	Ser	Gln	Ala	Pro	Val	
				215					220					225	
Ile	Phe	Ser	His	Ser	Ala	Ala	Arg	Gly	Val	Cys	Asn	Ser	Ala	Arg	
				230					235					240	
Asn	Val	Pro	Asp	Asp	Ile	Leu	Gln	Leu	Leu	Lys	Lys	Asn	Gly	Gly	
				245					250					255	
Val	Val	Met	Val	Ser	Leu	Ser	Met	Gly	Val	Ile	Gln	Cys	Asn	Pro	
				260					265					270	
Ser	Ala	Asn	Val	Ser	Thr	Val	Ala	Asp	His	Phe	Asp	His	Ile	Lys	
				275					280					285	
Ala	Val	Ile	Gly	Ser	Lys	Phe	Ile	Gly	Ile	Gly	Gly	Asp	Tyr	Asp	
				290					295					300	
Gly	Ala	Gly	Lys	Phe	Pro	Gln	Gly	Leu	Glu	Asp	Val	Ser	Thr	Tyr	
				305					310					315	
Pro	Val	Leu	Ile	Glu	Glu	Leu	Leu	Ser	Arg	Gly	Trp	Ser	Glu	Glu	
				320					325					330	
Glu	Leu	Gln	Gly	Val	Leu	Arg	Gly	Asn	Leu	Leu	Arg	Val	Phe	Arg	
				335					340					345	
Gln	Val	Glu	Lys	Val	Gln	Glu	Glu	Asn	Lys	Trp	Gln	Ser	Pro	Leu	
				350					355					360	
Glu	Asp	Lys	Phe	Pro	Asp	Glu	Gln	Leu	Ser	Ser	Ser	Cys	His	Ser	
				365					370					375	
Asp	Leu	Ser	Arg	Leu	Arg	Gln	Arg	Gln	Ser	Leu	Thr	Ser	Gly	Gln	

	380		385		390
Glu Leu Thr Glu Ile Pro Ile His Trp Thr Ala Lys Leu Pro Ala					
	395		400		405
Lys Trp Ser Val Ser Glu Ser Ser Pro His Met Ala Pro Val Leu					
	410		415		420
Ala Val Val Ala Thr Phe Pro Val Leu Ile Leu Trp Leu					
	425		430		

<210> 335
 <211> 1295
 <212> DNA
 <213> Homo Sapien

<400> 335
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 agccgccacc gcctcctcct gctgctgctg cgctacctgg tggtcgccct 150
 gggctatcat aaggcctatg ggttttctgc cccaaaagac caacaagtag 200
 tcacagcagt agagtaccaa gaggctattt tagcctgcaa aaccccaaag 250
 aagactgttt cctccagatt agagtggaag aaactgggtc ggagtgtctc 300
 ctttgtctac tatcaacaga ctcttcaagg tgattttaaa aatcgagctg 350
 agatgataga tttcaatatc cggatcaaaa atgtgacaag aagtgatgcg 400
 gggaaatatc gttgtgaagt tagtgcccca tctgagcaag gccaaaacct 450
 ggaagaggat acagtcactc tggaagtatt agtggctcca gcagttccat 500
 catgtgaagt accctcttct gctctgagtg gaactgtggt agagctacga 550
 tgtcaagaca aagaaggga tccagctcct gaatacacat ggtttaagga 600
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 gtcatacac aatgaatata aaaactggaa ctctgcaatt taatactgtt 700
 tccaaactgg aactggaga atattcctgt gaagcccgcga attctgttgg 750
 atatcgcagg tgtcctggga aacgaatgca agtagatgat ctcaacataa 800
 gtggcatcat agcagccgta gtagttgtgg ccttagtgat ttccgtttgt 850
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 atgtgcagtg gctcacgcct gtaatcccag cactttggaa ggccgcggcg 1000
 ggcggatcac gaggtcagga gttctagacc agtctggcca atatggtgaa 1050

accccatctc tactaaaata caaaaattag ctgggcatgg tggcatgtgc 1100
 ctgcagttcc agctgcttgg gagacaggag aatcacttga acccgggagg 1150
 cggaggttgc agtgagctga gatcacgcca ctgcagtcca gcctgggtaa 1200
 cagagcaaga ttccatctca aaaaataaaa taaataaata aataaatact 1250
 ggtttttacc tgtagaattc ttacaataaa tatagcttga tattc 1295

<210> 336

<211> 312

<212> PRT

<213> Homo Sapien

<400> 336

Met	Ala	Arg	Arg	Ser	Arg	His	Arg	Leu	Leu	Leu	Leu	Leu	Leu	Arg	1	5	10	15
Tyr	Leu	Val	Val	Ala	Leu	Gly	Tyr	His	Lys	Ala	Tyr	Gly	Phe	Ser	20	25	30	
Ala	Pro	Lys	Asp	Gln	Gln	Val	Val	Thr	Ala	Val	Glu	Tyr	Gln	Glu	35	40	45	
Ala	Ile	Leu	Ala	Cys	Lys	Thr	Pro	Lys	Lys	Thr	Val	Ser	Ser	Arg	50	55	60	
Leu	Glu	Trp	Lys	Lys	Leu	Gly	Arg	Ser	Val	Ser	Phe	Val	Tyr	Tyr	65	70	75	
Gln	Gln	Thr	Leu	Gln	Gly	Asp	Phe	Lys	Asn	Arg	Ala	Glu	Met	Ile	80	85	90	
Asp	Phe	Asn	Ile	Arg	Ile	Lys	Asn	Val	Thr	Arg	Ser	Asp	Ala	Gly	95	100	105	
Lys	Tyr	Arg	Cys	Glu	Val	Ser	Ala	Pro	Ser	Glu	Gln	Gly	Gln	Asn	110	115	120	
Leu	Glu	Glu	Asp	Thr	Val	Thr	Leu	Glu	Val	Leu	Val	Ala	Pro	Ala	125	130	135	
Val	Pro	Ser	Cys	Glu	Val	Pro	Ser	Ser	Ala	Leu	Ser	Gly	Thr	Val	140	145	150	
Val	Glu	Leu	Arg	Cys	Gln	Asp	Lys	Glu	Gly	Asn	Pro	Ala	Pro	Glu	155	160	165	
Tyr	Thr	Trp	Phe	Lys	Asp	Gly	Ile	Arg	Leu	Leu	Glu	Asn	Pro	Arg	170	175	180	
Leu	Gly	Ser	Gln	Ser	Thr	Asn	Ser	Ser	Tyr	Thr	Met	Asn	Thr	Lys	185	190	195	
Thr	Gly	Thr	Leu	Gln	Phe	Asn	Thr	Val	Ser	Lys	Leu	Asp	Thr	Gly	200	205	210	

Glu	Tyr	Ser	Cys	Glu	Ala	Arg	Asn	Ser	Val	Gly	Tyr	Arg	Arg	Cys
				215					220					225
Pro	Gly	Lys	Arg	Met	Gln	Val	Asp	Asp	Leu	Asn	Ile	Ser	Gly	Ile
				230					235					240
Ile	Ala	Ala	Val	Val	Val	Val	Ala	Leu	Val	Ile	Ser	Val	Cys	Gly
				245					250					255
Leu	Gly	Val	Cys	Tyr	Ala	Gln	Arg	Lys	Gly	Tyr	Phe	Ser	Lys	Glu
				260					265					270
Thr	Ser	Phe	Gln	Lys	Ser	Asn	Ser	Ser	Ser	Lys	Ala	Thr	Thr	Met
				275					280					285
Ser	Glu	Asn	Val	Gln	Trp	Leu	Thr	Pro	Val	Ile	Pro	Ala	Leu	Trp
				290					295					300
Lys	Ala	Ala	Ala	Gly	Gly	Ser	Arg	Gly	Gln	Glu	Phe			
				305					310					

<210> 337
 <211> 1813
 <212> DNA
 <213> Homo Sapien

<400> 337
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 gactccgtcc cggccaggga gggccatgat ttccctcccg gggcccctgg 150
 tgaccaactt gctgcggttt ttgttcctgg ggctgagtgc cctcgcgccc 200
 ccctcgcggg cccagctgca actgcacttg cccgccaacc ggttgcaggc 250
 ggtggaggga ggggaagtgg tgcttccagc gtggtacacc ttgcacgggg 300
 aggtgtcttc atcccagcca tgggaggtgc cctttgtgat gtggttcttc 350
 aaacagaaag aaaaggagga tcaggtgttg tcctacatca atgggggtcac 400
 aacaagcaaa cctggagtat ccttgggtcta ctccatgccc tcccgggaacc 450
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 atccttccag actttctttg caccagcatt agatgtcatc cgtgggtctt 750
 taagcctcac caacctttcg tcttccatgg ctggagtcta tgtctgcaag 800

gccacaaatg aggtgggcac tgcccaatgt aatgtgacgc tggaagtgag 850
 cacagggcct ggagctgcag tggttgctgg agctgttggt ggtaccctgg 900
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 ccctttcttc tgtcacctcc gcacgagccc tccggccacc ccattggcct 1100
 cccaggcctg gtgcattgac cccacgccc agtctctcca gccaggccct 1150
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 gtcacctcta gcacagaggc ctgagtcagt ggaaagagtc acactcctga 1400
 cccttagtac tctgccccca cctctcttta ctgtgggaaa accatctcag 1450
 taagacctaa gtgtccagga gacagaagga gaagaggaag tggatctgga 1500
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 ctgaaattag ctactacca agagtggagg gcagagactt ccagtcactg 1600
 agtctcccag gccccttga tctgtacccc acccctatct aacaccaccc 1650
 ttggctccca ctccagctcc ctgtattgat ataacctgtc aggctggctt 1700
 ggtagggttt tactggggca gaggataggg aatctcttat taaaactaac 1750
 atgaaatatg tgttgttttc atttgcaaat tttaaataaag atacataatg 1800
 tttgtatgaa aaa 1813

<210> 338
 <211> 390
 <212> PRT
 <213> Homo Sapien

<400> 338
 Met Ile Ser Leu Pro Gly Pro Leu Val Thr Asn Leu Leu Arg Phe
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 Leu Phe Leu Gly Leu Ser Ala Leu Ala Pro Pro Ser Arg Ala Gln
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 Leu Gln Leu His Leu Pro Ala Asn Arg Leu Gln Ala Val Glu Gly
 35 40 45
 Gly Glu Val Val Leu Pro Ala Trp Tyr Thr Leu His Gly Glu Val

				50					55					60	
Ser	Ser	Ser	Gln	Pro	Trp	Glu	Val	Pro	Phe	Val	Met	Trp	Phe	Phe	
				65					70					75	
Lys	Gln	Lys	Glu	Lys	Glu	Asp	Gln	Val	Leu	Ser	Tyr	Ile	Asn	Gly	
				80					85					90	
Val	Thr	Thr	Ser	Lys	Pro	Gly	Val	Ser	Leu	Val	Tyr	Ser	Met	Pro	
				95					100					105	
Ser	Arg	Asn	Leu	Ser	Leu	Arg	Leu	Glu	Gly	Leu	Gln	Glu	Lys	Asp	
				110					115					120	
Ser	Gly	Pro	Tyr	Ser	Cys	Ser	Val	Asn	Val	Gln	Asp	Lys	Gln	Gly	
				125					130					135	
Lys	Ser	Arg	Gly	His	Ser	Ile	Lys	Thr	Leu	Glu	Leu	Asn	Val	Leu	
				140					145					150	
Val	Pro	Pro	Ala	Pro	Pro	Ser	Cys	Arg	Leu	Gln	Gly	Val	Pro	His	
				155					160					165	
Val	Gly	Ala	Asn	Val	Thr	Leu	Ser	Cys	Gln	Ser	Pro	Arg	Ser	Lys	
				170					175					180	
Pro	Ala	Val	Gln	Tyr	Gln	Trp	Asp	Arg	Gln	Leu	Pro	Ser	Phe	Gln	
				185					190					195	
Thr	Phe	Phe	Ala	Pro	Ala	Leu	Asp	Val	Ile	Arg	Gly	Ser	Leu	Ser	
				200					205					210	
Leu	Thr	Asn	Leu	Ser	Ser	Ser	Met	Ala	Gly	Val	Tyr	Val	Cys	Lys	
				215					220					225	
Ala	His	Asn	Glu	Val	Gly	Thr	Ala	Gln	Cys	Asn	Val	Thr	Leu	Glu	
				230					235					240	
Val	Ser	Thr	Gly	Pro	Gly	Ala	Ala	Val	Val	Ala	Gly	Ala	Val	Val	
				245					250					255	
Gly	Thr	Leu	Val	Gly	Leu	Gly	Leu	Leu	Ala	Gly	Leu	Val	Leu	Leu	
				260					265					270	
Tyr	His	Arg	Arg	Gly	Lys	Ala	Leu	Glu	Glu	Pro	Ala	Asn	Asp	Ile	
				275					280					285	
Lys	Glu	Asp	Ala	Ile	Ala	Pro	Arg	Thr	Leu	Pro	Trp	Pro	Lys	Ser	
				290					295					300	
Ser	Asp	Thr	Ile	Ser	Lys	Asn	Gly	Thr	Leu	Ser	Ser	Val	Thr	Ser	
				305					310					315	
Ala	Arg	Ala	Leu	Arg	Pro	Pro	His	Gly	Pro	Pro	Arg	Pro	Gly	Ala	
				320					325					330	
Leu	Thr	Pro	Thr	Pro	Ser	Leu	Ser	Ser	Gln	Ala	Leu	Pro	Ser	Pro	
				335					340					345	

Arg	Leu	Pro	Thr	Thr	Asp	Gly	Ala	His	Pro	Gln	Pro	Ile	Ser	Pro
				350					355					360
Ile	Pro	Gly	Gly	Val	Ser	Ser	Ser	Gly	Leu	Ser	Arg	Met	Gly	Ala
				365					370					375
Val	Pro	Val	Met	Val	Pro	Ala	Gln	Ser	Gln	Ala	Gly	Ser	Leu	Val
				380					385					390

<210> 339
 <211> 3552
 <212> DNA
 <213> Homo Sapien

<400> 339
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 ggacagcgtc gggaaccaga ccatggctcc tggaccccaa gatccttaag 200
 ttcgtcgtct tcatcgtcgc ggttctgctg ccggtccggg ttgactctgc 250
 caccatcccc cggcaggacg aagttcccca gcagacagtg gccccacagc 300
 aacagaggcg cagcctcaag gaggaggagt gtccagcagg atctcataga 350
 tcagaatata ctggagcctg taaccctgct acagaggggtg tggattacac 400
 cattgcttcc aacaatttgc cttcttgctt gctatgtaca gtttgtaaatt 450
 caggtcaaac aaataaaaagt tcctgtacca cgaccagaga caccgtgtgt 500
 cagtgtgaaa aaggaagctt ccaggataaa aactcccctg agatgtgccg 550
 gacgtgtaga acaggggtgc ccagagggat ggtcaagggtc agtaattgta 600
 cgccccggag tgacatcaag tgcaaaaatg aatcagctgc cagttccact 650
 gggaaaaccc cagcagcgga ggagacagtg accaccatcc tggggatgct 700
 tgctctccc tatcactacc ttatcatcat agtggtttta gtcattcattt 750
 tagctgtggt tgtggttggc ttttcatgtc ggaagaaatt catttcttac 800
 ctcaaaggca tctgctcagg tgggtggagga ggtcccgaac gtgtgcacag 850
 agtccttttc cggcggcggt catgtccttc acgagttcct ggggcggagg 900
 acaatgcccg caacgagacc ctgagtaaca gatacttgca gccacccag 950
 gtctctgagc aggaaatcca aggtcaggag ctggcagagc taacaggtgt 1000
 gactgtagag tcgccagagg agccacagcg tctgctggaa caggcagaag 1050
 ctgaagggtg tcagaggagg aggctgctgg ttccagtga tgacgctgac 1100

Leu	Leu	Asp	Ala	Ser	Ala	Thr	Leu	Glu	Glu	Gly	His	Ala	Lys	Glu
				350					355					360
Thr	Ile	Gln	Asp	Gln	Leu	Val	Gly	Ser	Glu	Lys	Leu	Phe	Tyr	Glu
				365					370					375
Glu	Asp	Glu	Ala	Gly	Ser	Ala	Thr	Ser	Cys	Leu				
				380					385					

<210> 341
 <211> 1252
 <212> DNA
 <213> Homo Sapien

<400> 341
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 cctgttaatt ctggcttttg gccaggcagt ccaatttcaa gaatatgtct 150
 ttctccaatt tctgggctta gataaggcgc cttcacccca gaagttccaa 200
 cctgtgcctt atatcttgaa gaaaattttc caggatcgcg aggcagcagc 250
 gaccactggg gtctcccgag acttatgcta cgtaaaggag ctgggcgtcc 300
 gcgggaatgt acttcgcttt ctcccagacc aaggtttctt tctttaccca 350
 aagaaaattt cccaagcttc ctctgcctg cagaagctcc tctactttaa 400
 cctgtctgcc atcaaagaaa gggaacagtt gacattggcc cagctgggcc 450
 tggacttggg gcccaattct tactataacc tgggaccaga gctggaactg 500
 gctctgttcc tgggtcagga gcctcatgtg tggggccaga ccaccctaa 550
 gccaggtaaa atgtttgtgt tgcggtcagt cccatggcca caagggtgctg 600
 ttcacttcaa cctgctggat gtagctaagg attggaatga caacccccgg 650
 aaaaatttcg ggttattcct ggagatactg gtcaaagaag atagagactc 700
 aggggtgaat tttcagcctg aagacacctg tgccagacta agatgctccc 750
 ttcattgctt cctgctgggt gtgactctca accctgatca gtgccaccct 800
 tctcggaaaa ggagagcagc catccctgtc cccaagcttt cttgtaagaa 850
 cctctgccac cgtcaccagc tattcattaa cttccgggac ctgggttggc 900
 acaagtggat cattgcccc aaggggttca tggcaaatta ctgccatgga 950
 gagtgtccct tctcactgac catctctctc aacagctcca attatgcttt 1000
 catgcaagcc ctgatgcatg ccgttgaccc agagatcccc caggctgtgt 1050
 gtatccccac caagctgtct cccatttcca tgctctacca ggacaataat 1100

gacaatgtca ttctacgaca ttatgaagac atggtagtcg atgaatgtgg 1150
 gtgtgggtag gatgtcagaa atgggaatag aaggagtgtt cttagggtaa 1200
 atcttttaaat aaaactacct atctgggtta tgaccactta gatcgaaatg 1250
 tc 1252

<210> 342
 <211> 364
 <212> PRT
 <213> Homo Sapien

<400> 342
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 Gln Phe Leu Gly Leu Asp Lys Ala Pro Ser Pro Gln Lys Phe Gln
 35 40 45
 Pro Val Pro Tyr Ile Leu Lys Lys Ile Phe Gln Asp Arg Glu Ala
 50 55 60
 Ala Ala Thr Thr Gly Val Ser Arg Asp Leu Cys Tyr Val Lys Glu
 65 70 75
 Leu Gly Val Arg Gly Asn Val Leu Arg Phe Leu Pro Asp Gln Gly
 80 85 90
 Phe Phe Leu Tyr Pro Lys Lys Ile Ser Gln Ala Ser Ser Cys Leu
 95 100 105
 Gln Lys Leu Leu Tyr Phe Asn Leu Ser Ala Ile Lys Glu Arg Glu
 110 115 120
 Gln Leu Thr Leu Ala Gln Leu Gly Leu Asp Leu Gly Pro Asn Ser
 125 130 135
 Tyr Tyr Asn Leu Gly Pro Glu Leu Glu Leu Ala Leu Phe Leu Val
 140 145 150
 Gln Glu Pro His Val Trp Gly Gln Thr Thr Pro Lys Pro Gly Lys
 155 160 165
 Met Phe Val Leu Arg Ser Val Pro Trp Pro Gln Gly Ala Val His
 170 175 180
 Phe Asn Leu Leu Asp Val Ala Lys Asp Trp Asn Asp Asn Pro Arg
 185 190 195
 Lys Asn Phe Gly Leu Phe Leu Glu Ile Leu Val Lys Glu Asp Arg
 200 205 210
 Asp Ser Gly Val Asn Phe Gln Pro Glu Asp Thr Cys Ala Arg Leu
 215 220 225

Arg	Cys	Ser	Leu	His	Ala	Ser	Leu	Leu	Val	Val	Thr	Leu	Asn	Pro
				230					235					240
Asp	Gln	Cys	His	Pro	Ser	Arg	Lys	Arg	Arg	Ala	Ala	Ile	Pro	Val
				245					250					255
Pro	Lys	Leu	Ser	Cys	Lys	Asn	Leu	Cys	His	Arg	His	Gln	Leu	Phe
				260					265					270
Ile	Asn	Phe	Arg	Asp	Leu	Gly	Trp	His	Lys	Trp	Ile	Ile	Ala	Pro
				275					280					285
Lys	Gly	Phe	Met	Ala	Asn	Tyr	Cys	His	Gly	Glu	Cys	Pro	Phe	Ser
				290					295					300
Leu	Thr	Ile	Ser	Leu	Asn	Ser	Ser	Asn	Tyr	Ala	Phe	Met	Gln	Ala
				305					310					315
Leu	Met	His	Ala	Val	Asp	Pro	Glu	Ile	Pro	Gln	Ala	Val	Cys	Ile
				320					325					330
Pro	Thr	Lys	Leu	Ser	Pro	Ile	Ser	Met	Leu	Tyr	Gln	Asp	Asn	Asn
				335					340					345
Asp	Asn	Val	Ile	Leu	Arg	His	Tyr	Glu	Asp	Met	Val	Val	Asp	Glu
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Cys Gly Cys Gly

<210> 343
 <211> 2917
 <212> DNA
 <213> Homo Sapien

<400> 343
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 ggatcctagg ccgccctggg aagacatttg tgttttacac acataaggat 150
 ctgtgttttg ggtttcttct tcctcccctg acattggcat tgcttagtgg 200
 ttgtgtgggg agggagacca cgtgggctca gtgcttgctt gcacttatct 250
 gcctaggtac atcgaagtct tttgacctcc atacagtgat tatgcctgtc 300
 atcgctggtg gtatcctggc ggccttgctc ctgctgatag ttgtcgtgct 350
 ctgtctttac ttcaaaatac acaacgcgct aaaagctgca aaggaacctg 400
 aagctgtggc tgtaaaaaat cacaaccag acaaggtgtg gtgggccaag 450
 aacagccagg ccaaaaccat tgccacggag tcttgtcctg cctgcagtg 500
 ctgtgaagga tatagaatgt gtgccagttt tgattccctg ccaccttgct 550

gttgcgacat aaatgagggc ctctgagtta ggaaaggctc ccttctcaaa 600
 gcagagccct gaagacttca atgatgtcaa tgaggccacc tgtttgtgat 650
 gtgcaggcac agaagaaagg cacagctccc catcagtttc atggaaaata 700
 actcagtgcc tgctgggaac cagctgctgg agatccctac agagagcttc 750
 cactgggggc aacccttcca ggaaggagtt ggggagagag aaccctcact 800
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 tctaccctt gcgtggctgg aactgacgtt tccctggagg tgtccagaaa 900
 gctgatgtaa cacagagcct ataaaagctg tcggctccta aggctgcccc 950
 gcgccttgcc aaaatggagc ttgtaagaag gctcatgcca ttgaccctct 1000
 taattctctc ctgtttggcg gagctgacaa tggcggaggc tgaaggcaat 1050
 gcaagctgca cagtcagtct agggggtgcc aatatggcag agaccacaaa 1100
 agccatgatc ctgcaactca atcccagtga gaactgcacc tggacaatag 1150
 aaagaccaga aaacaaaagc atcagaatta tcttttctta tgtccagctt 1200
 gatccagatg gaagctgtga aagtgaaaac attaaagtct ttgacggaac 1250
 ctccagcaat gggcctctgc tagggcaagt ctgcagtaaa aacgactatg 1300
 ttctgtatt tgaatcatca tccagtacat tgacgtttca aatagttact 1350
 gactcagcaa gaattcaaag aactgtcttt gtcttctact acttcttctc 1400
 tctaacatc tctattccaa actgtggcgg ttacctggat accttggaag 1450
 gatccttcac cagccccaat tacccaaagc cgcacccctga gctggcttat 1500
 tgtgtgtggc acatacaagt ggagaaagat tacaagataa aactaaactt 1550
 caaagagatt ttctagaaa tagacaaaca gtgcaaattt gattttcttg 1600
 ccatctatga tggccctcc accaactctg gcctgattgg acaagtctgt 1650
 ggccgtgtga ctccacctt cgaatcgtca tcaaactctc tgactgtcgt 1700
 gttgtctaca gattatgcca attcttaccg gggattttct gcttcctaca 1750
 cctcaattta tgcagaaaac atcaacacta catctttaac ttgctcttct 1800
 gacaggatga gagttattat aagcaaactc tacctagagg cttttaactc 1850
 taatgggaat aacttgcaac taaaagacct aacttgca ccaaaattat 1900
 caaatgttgt ggaattttct gtccctctta atggatgtgg tacaatcaga 1950
 aaggtagaag atcagtcaat tacttacacc aatataatca cttttctgc 2000

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<210> 344
 <211> 607
 <212> PRT
 <213> Homo Sapien

<400> 344
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 35 40 45
 Lys Ala Met Ile Leu Gln Leu Asn Pro Ser Glu Asn Cys Thr Trp
 50 55 60
 Thr Ile Glu Arg Pro Glu Asn Lys Ser Ile Arg Ile Ile Phe Ser
 65 70 75

Tyr	Val	Gln	Leu	Asp	Pro	Asp	Gly	Ser	Cys	Glu	Ser	Glu	Asn	Ile	
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Lys	Val	Phe	Asp	Gly	Thr	Ser	Ser	Asn	Gly	Pro	Leu	Leu	Gly	Gln	
				95					100					105	
Val	Cys	Ser	Lys	Asn	Asp	Tyr	Val	Pro	Val	Phe	Glu	Ser	Ser	Ser	
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Ser	Thr	Leu	Thr	Phe	Gln	Ile	Val	Thr	Asp	Ser	Ala	Arg	Ile	Gln	
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Thr	Ser	Pro	Asn	Tyr	Pro	Lys	Pro	His	Pro	Glu	Leu	Ala	Tyr	Cys	
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Val	Trp	His	Ile	Gln	Val	Glu	Lys	Asp	Tyr	Lys	Ile	Lys	Leu	Asn	
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Phe	Lys	Glu	Ile	Phe	Leu	Glu	Ile	Asp	Lys	Gln	Cys	Lys	Phe	Asp	
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Phe	Leu	Ala	Ile	Tyr	Asp	Gly	Pro	Ser	Thr	Asn	Ser	Gly	Leu	Ile	
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Gly	Gln	Val	Cys	Gly	Arg	Val	Thr	Pro	Thr	Phe	Glu	Ser	Ser	Ser	
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Val	Glu	Asp	Gln	Ser	Ile	Thr	Tyr	Thr	Asn	Ile	Ile	Thr	Phe	Ser	
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Ala	Ser	Ser	Thr	Ser	Glu	Val	Ile	Thr	Arg	Gln	Lys	Gln	Leu	Gln	
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	395	400	405
Glu Lys Thr Ile	Leu Glu Ser Pro Tyr	Tyr Val Asp Leu Asn	Gln
	410	415	420
Thr Leu Phe Val	Gln Val Ser Leu His	Thr Ser Asp Pro Asn	Leu
	425	430	435
Val Val Phe Leu	Asp Thr Cys Arg Ala	Ser Pro Thr Ser Asp	Phe
	440	445	450
Ala Ser Pro Thr	Tyr Asp Leu Ile Lys	Ser Gly Cys Ser Arg	Asp
	455	460	465
Glu Thr Cys Lys	Val Tyr Pro Leu Phe	Gly His Tyr Gly Arg	Phe
	470	475	480
Gln Phe Asn Ala	Phe Lys Phe Leu Arg	Ser Met Ser Ser Val	Tyr
	485	490	495
Leu Gln Cys Lys	Val Leu Ile Cys Asp	Ser Ser Asp His Gln	Ser
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Arg Cys Asn Gln	Gly Cys Val Ser Arg	Ser Lys Arg Asp Ile	Ser
	515	520	525
Ser Tyr Lys Trp	Lys Thr Asp Ser Ile	Ile Gly Pro Ile Arg	Leu
	530	535	540
Lys Arg Asp Arg	Ser Ala Ser Gly Asn	Ser Gly Phe Gln His	Glu
	545	550	555
Thr His Ala Glu	Glu Thr Pro Asn Gln	Pro Phe Asn Ser Val	His
	560	565	570
Leu Phe Ser Phe	Met Val Leu Ala Leu	Asn Val Val Thr Val	Ala
	575	580	585
Thr Ile Thr Val	Arg His Phe Val Asn	Gln Arg Ala Asp Tyr	Lys
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	605		

<210> 345

<211> 2933

<212> DNA

<213> Homo Sapien

<400> 345

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 <211> 723
 <212> PRT
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<400> 346

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Glu	Phe	Val	Asn	Lys	Lys	Gly	Leu	Leu	Gly	Asn	Arg	Asn	Cys	Cys	35	40	45	
Arg	Gly	Gly	Ala	Gly	Pro	Pro	Pro	Cys	Ala	Cys	Arg	Thr	Phe	Phe	50	55	60	
Arg	Val	Cys	Leu	Lys	His	Tyr	Gln	Ala	Ser	Val	Ser	Pro	Glu	Pro	65	70	75	
Pro	Cys	Thr	Tyr	Gly	Ser	Ala	Val	Thr	Pro	Val	Leu	Gly	Val	Asp	80	85	90	
Ser	Phe	Ser	Leu	Pro	Asp	Gly	Gly	Gly	Ala	Asp	Ser	Ala	Phe	Ser	95	100	105	
Asn	Pro	Ile	Arg	Phe	Pro	Phe	Gly	Phe	Thr	Trp	Pro	Gly	Thr	Phe	110	115	120	
Ser	Leu	Ile	Ile	Glu	Ala	Leu	His	Thr	Asp	Ser	Pro	Asp	Asp	Leu	125	130	135	
Ala	Thr	Glu	Asn	Pro	Glu	Arg	Leu	Ile	Ser	Arg	Leu	Ala	Thr	Gln	140	145	150	
Arg	His	Leu	Thr	Val	Gly	Glu	Glu	Trp	Ser	Gln	Asp	Leu	His	Ser	155	160	165	
Ser	Gly	Arg	Thr	Asp	Leu	Lys	Tyr	Ser	Tyr	Arg	Phe	Val	Cys	Asp	170	175	180	
Glu	His	Tyr	Tyr	Gly	Glu	Gly	Cys	Ser	Val	Phe	Cys	Arg	Pro	Arg	185	190	195	
Asp	Asp	Ala	Phe	Gly	His	Phe	Thr	Cys	Gly	Glu	Arg	Gly	Glu	Lys	200	205	210	
Val	Cys	Asn	Pro	Gly	Trp	Lys	Gly	Pro	Tyr	Cys	Thr	Glu	Pro	Ile	215	220	225	
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Gly	Glu	Cys	Lys	Cys	Arg	Val	Gly	Trp	Gln	Gly	Arg	Tyr	Cys	Asp	245	250	255	
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Leu	Met	Leu	Leu	Leu	Gly	Cys	Ala	Ala	Val	Val	Val	Cys	Val	Arg
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Glu	Thr	Glu	Thr	Met	Asn	Asn	Leu	Ala	Asn	Cys	Gln	Arg	Glu	Lys
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Asp	Ile	Ser	Val	Ser	Ile	Ile	Gly	Ala	Thr	Gln	Ile	Lys	Asn	Thr
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				620					625					630
Gly	Phe	Lys	Ala	Arg	Tyr	Pro	Ala	Val	Asp	Tyr	Asn	Leu	Val	Gln
				635					640					645
Asp	Leu	Lys	Gly	Asp	Asp	Thr	Ala	Val	Arg	Asp	Ala	His	Ser	Lys
				650					655					660
Arg	Asp	Thr	Lys	Cys	Gln	Pro	Gln	Gly	Ser	Ser	Gly	Glu	Glu	Lys
				665					670					675
Gly	Thr	Pro	Thr	Thr	Leu	Arg	Gly	Gly	Glu	Ala	Ser	Glu	Arg	Lys
				680					685					690
Arg	Pro	Asp	Ser	Gly	Cys	Ser	Thr	Ser	Lys	Asp	Thr	Lys	Tyr	Gln
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 <211> 1685
 <212> DNA
 <213> Homo Sapien

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Val	Val	Leu	Lys	Cys	Gln	Val	Lys	Asp	His	Glu	Asp	Ser	Ser	Leu	50	55	60	
Gln	Trp	Ser	Asn	Pro	Ala	Gln	Gln	Thr	Leu	Tyr	Phe	Gly	Glu	Lys	65	70	75	
Arg	Ala	Leu	Arg	Asp	Asn	Arg	Ile	Gln	Leu	Val	Thr	Ser	Thr	Pro	80	85	90	
His	Glu	Leu	Ser	Ile	Ser	Ile	Ser	Asn	Val	Ala	Leu	Ala	Asp	Glu	95	100	105	
Gly	Glu	Tyr	Thr	Cys	Ser	Ile	Phe	Thr	Met	Pro	Val	Arg	Thr	Ala	110	115	120	
Lys	Ser	Leu	Val	Thr	Val	Leu	Gly	Ile	Pro	Gln	Lys	Pro	Ile	Ile	125	130	135	
Thr	Gly	Tyr	Lys	Ser	Ser	Leu	Arg	Glu	Lys	Asp	Thr	Ala	Thr	Leu	140	145	150	
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Arg	Lys	Gly	Asp	Gln	Glu	Leu	His	Gly	Glu	Pro	Thr	Arg	Ile	Gln	170	175	180	
Glu	Asp	Pro	Asn	Gly	Lys	Thr	Phe	Thr	Val	Ser	Ser	Ser	Val	Thr	185	190	195	
Phe	Gln	Val	Thr	Arg	Glu	Asp	Asp	Gly	Ala	Ser	Ile	Val	Cys	Ser	200	205	210	
Val	Asn	His	Glu	Ser	Leu	Lys	Gly	Ala	Asp	Arg	Ser	Thr	Ser	Gln	215	220	225	
Arg	Ile	Glu	Val	Leu	Tyr	Thr	Pro	Thr	Ala	Met	Ile	Arg	Pro	Asp	230	235	240	
Pro	Pro	His	Pro	Arg	Glu	Gly	Gln	Lys	Leu	Leu	Leu	His	Cys	Glu	245	250	255	
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Gly	Ser	Val	Pro	Pro	Leu	Lys	Met	Thr	Gln	Glu	Ser	Ala	Leu	Ile	275	280	285	
Phe	Pro	Phe	Leu	Asn	Lys	Ser	Asp	Ser	Gly	Thr	Tyr	Gly	Cys	Thr				

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335	340	345
Ile Met Leu Ile Phe Leu Gly His Tyr	Leu Ile Arg His Lys Gly	
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Thr Tyr Leu Thr His Glu Ala Lys Gly	Ser Asp Asp Ala Pro Asp	
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<211> 2479

<212> DNA

<213> Homo Sapien

<400> 349

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<210> 350

<211> 660

<212> PRT

<213> Homo Sapien

<400> 350

Met	Gly	Leu	Gln	Thr	Thr	Lys	Trp	Pro	Ser	His	Gly	Ala	Phe	Phe	1	5	10	15
Leu	Lys	Ser	Trp	Leu	Ile	Ile	Ser	Leu	Gly	Leu	Tyr	Ser	Gln	Val	20	25	30	
Ser	Lys	Leu	Leu	Ala	Cys	Pro	Ser	Val	Cys	Arg	Cys	Asp	Arg	Asn	35	40	45	
Phe	Val	Tyr	Cys	Asn	Glu	Arg	Ser	Leu	Thr	Ser	Val	Pro	Leu	Gly	50	55	60	
Ile	Pro	Glu	Gly	Val	Thr	Val	Leu	Tyr	Leu	His	Asn	Asn	Gln	Ile	65	70	75	
Asn	Asn	Ala	Gly	Phe	Pro	Ala	Glu	Leu	His	Asn	Val	Gln	Ser	Val	80	85	90	
His	Thr	Val	Tyr	Leu	Tyr	Gly	Asn	Gln	Leu	Asp	Glu	Phe	Pro	Met	95	100	105	
Asn	Leu	Pro	Lys	Asn	Val	Arg	Val	Leu	His	Leu	Gln	Glu	Asn	Asn	110	115	120	
Ile	Gln	Thr	Ile	Ser	Arg	Ala	Ala	Leu	Ala	Gln	Leu	Leu	Lys	Leu	125	130	135	
Glu	Glu	Leu	His	Leu	Asp	Asp	Asn	Ser	Ile	Ser	Thr	Val	Gly	Val	140	145	150	
Glu	Asp	Gly	Ala	Phe	Arg	Glu	Ala	Ile	Ser	Leu	Lys	Leu	Leu	Phe	155	160	165	
Leu	Ser	Lys	Asn	His	Leu	Ser	Ser	Val	Pro	Val	Gly	Leu	Pro	Val	170	175	180	
Asp	Leu	Gln	Glu	Leu	Arg	Val	Asp	Glu	Asn	Arg	Ile	Ala	Val	Ile	185	190	195	
Ser	Asp	Met	Ala	Phe	Gln	Asn	Leu	Thr	Ser	Leu	Glu	Arg	Leu	Ile				

				200					205					210
Val	Asp	Gly	Asn	Leu	Leu	Thr	Asn	Lys	Gly	Ile	Ala	Glu	Gly	Thr
				215					220					225
Phe	Ser	His	Leu	Thr	Lys	Leu	Lys	Glu	Phe	Ser	Ile	Val	Arg	Asn
				230					235					240
Ser	Leu	Ser	His	Pro	Pro	Pro	Asp	Leu	Pro	Gly	Thr	His	Leu	Ile
				245					250					255
Arg	Leu	Tyr	Leu	Gln	Asp	Asn	Gln	Ile	Asn	His	Ile	Pro	Leu	Thr
				260					265					270
Ala	Phe	Ser	Asn	Leu	Arg	Lys	Leu	Glu	Arg	Leu	Asp	Ile	Ser	Asn
				275					280					285
Asn	Gln	Leu	Arg	Met	Leu	Thr	Gln	Gly	Val	Phe	Asp	Asn	Leu	Ser
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Asn	Leu	Lys	Gln	Leu	Thr	Ala	Arg	Asn	Asn	Pro	Trp	Phe	Cys	Asp
				305					310					315
Cys	Ser	Ile	Lys	Trp	Val	Thr	Glu	Trp	Leu	Lys	Tyr	Ile	Pro	Ser
				320					325					330
Ser	Leu	Asn	Val	Arg	Gly	Phe	Met	Cys	Gln	Gly	Pro	Glu	Gln	Val
				335					340					345
Arg	Gly	Met	Ala	Val	Arg	Glu	Leu	Asn	Met	Asn	Leu	Leu	Ser	Cys
				350					355					360
Pro	Thr	Thr	Thr	Pro	Gly	Leu	Pro	Leu	Phe	Thr	Pro	Ala	Pro	Ser
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Thr	Ala	Ser	Pro	Thr	Thr	Gln	Pro	Pro	Thr	Leu	Ser	Ile	Pro	Asn
				380					385					390
Pro	Ser	Arg	Ser	Tyr	Thr	Pro	Pro	Thr	Pro	Thr	Thr	Ser	Lys	Leu
				395					400					405
Pro	Thr	Ile	Pro	Asp	Trp	Asp	Gly	Arg	Glu	Arg	Val	Thr	Pro	Pro
				410					415					420
Ile	Ser	Glu	Arg	Ile	Gln	Leu	Ser	Ile	His	Phe	Val	Asn	Asp	Thr
				425					430					435
Ser	Ile	Gln	Val	Ser	Trp	Leu	Ser	Leu	Phe	Thr	Val	Met	Ala	Tyr
				440					445					450
Lys	Leu	Thr	Trp	Val	Lys	Met	Gly	His	Ser	Leu	Val	Gly	Gly	Ile
				455					460					465
Val	Gln	Glu	Arg	Ile	Val	Ser	Gly	Glu	Lys	Gln	His	Leu	Ser	Leu
				470					475					480
Val	Asn	Leu	Glu	Pro	Arg	Ser	Thr	Tyr	Arg	Ile	Cys	Leu	Val	Pro
				485					490					495

Leu	Asp	Ala	Phe	Asn	Tyr	Arg	Ala	Val	Glu	Asp	Thr	Ile	Cys	Ser	500	505	510
Glu	Ala	Thr	Thr	His	Ala	Ser	Tyr	Leu	Asn	Asn	Gly	Ser	Asn	Thr	515	520	525
Ala	Ser	Ser	His	Glu	Gln	Thr	Thr	Ser	His	Ser	Met	Gly	Ser	Pro	530	535	540
Phe	Leu	Leu	Ala	Gly	Leu	Ile	Gly	Gly	Ala	Val	Ile	Phe	Val	Leu	545	550	555
Val	Val	Leu	Leu	Ser	Val	Phe	Cys	Trp	His	Met	His	Lys	Lys	Gly	560	565	570
Arg	Tyr	Thr	Ser	Gln	Lys	Trp	Lys	Tyr	Asn	Arg	Gly	Arg	Arg	Lys	575	580	585
Asp	Asp	Tyr	Cys	Glu	Ala	Gly	Thr	Lys	Lys	Asp	Asn	Ser	Ile	Leu	590	595	600
Glu	Met	Thr	Glu	Thr	Ser	Phe	Gln	Ile	Val	Ser	Leu	Asn	Asn	Asp	605	610	615
Gln	Leu	Leu	Lys	Gly	Asp	Phe	Arg	Leu	Gln	Pro	Ile	Tyr	Thr	Pro	620	625	630
Asn	Gly	Gly	Ile	Asn	Tyr	Thr	Asp	Cys	His	Ile	Pro	Asn	Asn	Met	635	640	645
Arg	Tyr	Cys	Asn	Ser	Ser	Val	Pro	Asp	Leu	Glu	His	Cys	His	Thr	650	655	660

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 <211> 4053
 <212> DNA
 <213> Homo Sapien

<400> 351
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<210> 352
 <211> 1119
 <212> PRT
 <213> Homo Sapien

<400> 352
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 Gly Arg Gly Glu Leu Gly Gln Pro Ser Gly Val Ala Ala Glu Arg
 35 40 45
 Pro Cys Pro Thr Thr Cys Arg Cys Leu Gly Asp Leu Leu Asp Cys
 50 55 60
 Ser Arg Lys Arg Leu Ala Arg Leu Pro Glu Pro Leu Pro Ser Trp
 65 70 75
 Val Ala Arg Leu Asp Leu Ser His Asn Arg Leu Ser Phe Ile Lys
 80 85 90
 Ala Ser Ser Met Ser His Leu Gln Ser Leu Arg Glu Val Lys Leu
 95 100 105
 Asn Asn Asn Glu Leu Glu Thr Ile Pro Asn Leu Gly Pro Val Ser
 110 115 120

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				125					130					135	
Ile	Leu	Pro	Glu	His	Leu	Lys	Glu	Phe	Gln	Ser	Leu	Glu	Thr	Leu	
				140					145					150	
Asp	Leu	Ser	Ser	Asn	Asn	Ile	Ser	Glu	Leu	Gln	Thr	Ala	Phe	Pro	
				155					160					165	
Ala	Leu	Gln	Leu	Lys	Tyr	Leu	Tyr	Leu	Asn	Ser	Asn	Arg	Val	Thr	
				170					175					180	
Ser	Met	Glu	Pro	Gly	Tyr	Phe	Asp	Asn	Leu	Ala	Asn	Thr	Leu	Leu	
				185					190					195	
Val	Leu	Lys	Leu	Asn	Arg	Asn	Arg	Ile	Ser	Ala	Ile	Pro	Pro	Lys	
				200					205					210	
Met	Phe	Lys	Leu	Pro	Gln	Leu	Gln	His	Leu	Glu	Leu	Asn	Arg	Asn	
				215					220					225	
Lys	Ile	Lys	Asn	Val	Asp	Gly	Leu	Thr	Phe	Gln	Gly	Leu	Gly	Ala	
				230					235					240	
Leu	Lys	Ser	Leu	Lys	Met	Gln	Arg	Asn	Gly	Val	Thr	Lys	Leu	Met	
				245					250					255	
Asp	Gly	Ala	Phe	Trp	Gly	Leu	Ser	Asn	Met	Glu	Ile	Leu	Gln	Leu	
				260					265					270	
Asp	His	Asn	Asn	Leu	Thr	Glu	Ile	Thr	Lys	Gly	Trp	Leu	Tyr	Gly	
				275					280					285	
Leu	Leu	Met	Leu	Gln	Glu	Leu	His	Leu	Ser	Gln	Asn	Ala	Ile	Asn	
				290					295					300	
Arg	Ile	Ser	Pro	Asp	Ala	Trp	Glu	Phe	Cys	Gln	Lys	Leu	Ser	Glu	
				305					310					315	
Leu	Asp	Leu	Thr	Phe	Asn	His	Leu	Ser	Arg	Leu	Asp	Asp	Ser	Ser	
				320					325					330	
Phe	Leu	Gly	Leu	Ser	Leu	Leu	Asn	Thr	Leu	His	Ile	Gly	Asn	Asn	
				335					340					345	
Arg	Val	Ser	Tyr	Ile	Ala	Asp	Cys	Ala	Phe	Arg	Gly	Leu	Ser	Ser	
				350					355					360	
Leu	Lys	Thr	Leu	Asp	Leu	Lys	Asn	Asn	Glu	Ile	Ser	Trp	Thr	Ile	
				365					370					375	
Glu	Asp	Met	Asn	Gly	Ala	Phe	Ser	Gly	Leu	Asp	Lys	Leu	Arg	Arg	
				380					385					390	
Leu	Ile	Leu	Gln	Gly	Asn	Arg	Ile	Arg	Ser	Ile	Thr	Lys	Lys	Ala	
				395					400					405	
Phe	Thr	Gly	Leu	Asp	Ala	Leu	Glu	His	Leu	Asp	Leu	Ser	Asp	Asn	

				410						415					420
Ala	Ile	Met	Ser	Leu	Gln	Gly	Asn	Ala	Phe	Ser	Gln	Met	Lys	Lys	
				425					430					435	
Leu	Gln	Gln	Leu	His	Leu	Asn	Thr	Ser	Ser	Leu	Leu	Cys	Asp	Cys	
				440					445					450	
Gln	Leu	Lys	Trp	Leu	Pro	Gln	Trp	Val	Ala	Glu	Asn	Asn	Phe	Gln	
				455					460					465	
Ser	Phe	Val	Asn	Ala	Ser	Cys	Ala	His	Pro	Gln	Leu	Leu	Lys	Gly	
				470					475					480	
Arg	Ser	Ile	Phe	Ala	Val	Ser	Pro	Asp	Gly	Phe	Val	Cys	Asp	Asp	
				485					490					495	
Phe	Pro	Lys	Pro	Gln	Ile	Thr	Val	Gln	Pro	Glu	Thr	Gln	Ser	Ala	
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Ile	Lys	Gly	Ser	Asn	Leu	Ser	Phe	Ile	Cys	Ser	Ala	Ala	Ser	Ser	
				515					520					525	
Ser	Asp	Ser	Pro	Met	Thr	Phe	Ala	Trp	Lys	Lys	Asp	Asn	Glu	Leu	
				530					535					540	
Leu	His	Asp	Ala	Glu	Met	Glu	Asn	Tyr	Ala	His	Leu	Arg	Ala	Gln	
				545					550					555	
Gly	Gly	Glu	Val	Met	Glu	Tyr	Thr	Thr	Ile	Leu	Arg	Leu	Arg	Glu	
				560					565					570	
Val	Glu	Phe	Ala	Ser	Glu	Gly	Lys	Tyr	Gln	Cys	Val	Ile	Ser	Asn	
				575					580					585	
His	Phe	Gly	Ser	Ser	Tyr	Ser	Val	Lys	Ala	Lys	Leu	Thr	Val	Asn	
				590					595					600	
Met	Leu	Pro	Ser	Phe	Thr	Lys	Thr	Pro	Met	Asp	Leu	Thr	Ile	Arg	
				605					610					615	
Ala	Gly	Ala	Met	Ala	Arg	Leu	Glu	Cys	Ala	Ala	Val	Gly	His	Pro	
				620					625					630	
Ala	Pro	Gln	Ile	Ala	Trp	Gln	Lys	Asp	Gly	Gly	Thr	Asp	Phe	Pro	
				635					640					645	
Ala	Ala	Arg	Glu	Arg	Arg	Met	His	Val	Met	Pro	Glu	Asp	Asp	Val	
				650					655					660	
Phe	Phe	Ile	Val	Asp	Val	Lys	Ile	Glu	Asp	Ile	Gly	Val	Tyr	Ser	
				665					670					675	
Cys	Thr	Ala	Gln	Asn	Ser	Ala	Gly	Ser	Ile	Ser	Ala	Asn	Ala	Thr	
				680					685					690	
Leu	Thr	Val	Leu	Glu	Thr	Pro	Ser	Phe	Leu	Arg	Pro	Leu	Leu	Asp	
				695					700					705	

Arg	Thr	Val	Thr	Lys	Gly	Glu	Thr	Ala	Val	Leu	Gln	Cys	Ile	Ala	710	715	720
Gly	Gly	Ser	Pro	Pro	Pro	Lys	Leu	Asn	Trp	Thr	Lys	Asp	Asp	Ser	725	730	735
Pro	Leu	Val	Val	Thr	Glu	Arg	His	Phe	Phe	Ala	Ala	Gly	Asn	Gln	740	745	750
Leu	Leu	Ile	Ile	Val	Asp	Ser	Asp	Val	Ser	Asp	Ala	Gly	Lys	Tyr	755	760	765
Thr	Cys	Glu	Met	Ser	Asn	Thr	Leu	Gly	Thr	Glu	Arg	Gly	Asn	Val	770	775	780
Arg	Leu	Ser	Val	Ile	Pro	Thr	Pro	Thr	Cys	Asp	Ser	Pro	Gln	Met	785	790	795
Thr	Ala	Pro	Ser	Leu	Asp	Asp	Asp	Gly	Trp	Ala	Thr	Val	Gly	Val	800	805	810
Val	Ile	Ile	Ala	Val	Val	Cys	Cys	Val	Val	Gly	Thr	Ser	Leu	Val	815	820	825
Trp	Val	Val	Ile	Ile	Tyr	His	Thr	Arg	Arg	Arg	Asn	Glu	Asp	Cys	830	835	840
Ser	Ile	Thr	Asn	Thr	Asp	Glu	Thr	Asn	Leu	Pro	Ala	Asp	Ile	Pro	845	850	855
Ser	Tyr	Leu	Ser	Ser	Gln	Gly	Thr	Leu	Ala	Asp	Arg	Gln	Asp	Gly	860	865	870
Tyr	Val	Ser	Ser	Glu	Ser	Gly	Ser	His	His	Gln	Phe	Val	Thr	Ser	875	880	885
Ser	Gly	Ala	Gly	Phe	Phe	Leu	Pro	Gln	His	Asp	Ser	Ser	Gly	Thr	890	895	900
Cys	His	Ile	Asp	Asn	Ser	Ser	Glu	Ala	Asp	Val	Glu	Ala	Ala	Thr	905	910	915
Asp	Leu	Phe	Leu	Cys	Pro	Phe	Leu	Gly	Ser	Thr	Gly	Pro	Met	Tyr	920	925	930
Leu	Lys	Gly	Asn	Val	Tyr	Gly	Ser	Asp	Pro	Phe	Glu	Thr	Tyr	His	935	940	945
Thr	Gly	Cys	Ser	Pro	Asp	Pro	Arg	Thr	Val	Leu	Met	Asp	His	Tyr	950	955	960
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Pro	Ser	Glu	Glu	Ser	Cys	Glu	Arg	Ser	Phe	Ser	Asn	Ile	Ser	Trp	980	985	990
Pro	Ser	His	Val	Arg	Lys	Leu	Leu	Asn	Thr	Ser	Tyr	Ser	His	Asn			

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	1025		1030		1035
Ser Phe Met Gly Thr Phe Gly Lys Ala Leu Arg Arg Pro His Leu					
	1040		1045		1050
Asp Ala Tyr Ser Ser Phe Gly Gln Pro Ser Asp Cys Gln Pro Arg					
	1055		1060		1065
Ala Phe Tyr Leu Lys Ala His Ser Ser Pro Asp Leu Asp Ser Gly					
	1070		1075		1080
Ser Glu Glu Asp Gly Lys Glu Arg Thr Asp Phe Gln Glu Glu Asn					
	1085		1090		1095
His Ile Cys Thr Phe Lys Gln Thr Leu Glu Asn Tyr Arg Thr Pro					
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Asn Phe Gln Ser Tyr Asp Leu Asp Thr					
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 <211> 2755
 <212> DNA
 <213> Homo Sapien

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 attgctcgct ttaaaaatgc tgctttggat tctgttgctg gagacgtctc 200
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 agaccggggg gccttccagg acttgaacaa gctggaggtg ctcattttta 650

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<211> 696

<212> PRT

<213> Homo Sapien

<400> 354

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Cys	Asn	Glu	Ile	Glu	Gly	Asp	Leu	His	Val	Asp	Cys	Glu	Lys	Lys
				35					40					45
Gly	Phe	Thr	Ser	Leu	Gln	Arg	Phe	Thr	Ala	Pro	Thr	Ser	Gln	Phe
				50					55					60
Tyr	His	Leu	Phe	Leu	His	Gly	Asn	Ser	Leu	Thr	Arg	Leu	Phe	Pro
				65					70					75
Asn	Glu	Phe	Ala	Asn	Phe	Tyr	Asn	Ala	Val	Ser	Leu	His	Met	Glu
				80					85					90
Asn	Asn	Gly	Leu	His	Glu	Ile	Val	Pro	Gly	Ala	Phe	Leu	Gly	Leu
				95					100					105
Gln	Leu	Val	Lys	Arg	Leu	His	Ile	Asn	Asn	Asn	Lys	Ile	Lys	Ser
				110					115					120

Phe	Arg	Lys	Gln	Thr	Phe	Leu	Gly	Leu	Asp	Asp	Leu	Glu	Tyr	Leu	
				125					130					135	
Gln	Ala	Asp	Phe	Asn	Leu	Leu	Arg	Asp	Ile	Asp	Pro	Gly	Ala	Phe	
				140					145					150	
Gln	Asp	Leu	Asn	Lys	Leu	Glu	Val	Leu	Ile	Leu	Asn	Asp	Asn	Leu	
				155					160					165	
Ile	Ser	Thr	Leu	Pro	Ala	Asn	Val	Phe	Gln	Tyr	Val	Pro	Ile	Thr	
				170					175					180	
His	Leu	Asp	Leu	Arg	Gly	Asn	Arg	Leu	Lys	Thr	Leu	Pro	Tyr	Glu	
				185					190					195	
Glu	Val	Leu	Glu	Gln	Ile	Pro	Gly	Ile	Ala	Glu	Ile	Leu	Leu	Glu	
				200					205					210	
Asp	Asn	Pro	Trp	Asp	Cys	Thr	Cys	Asp	Leu	Leu	Ser	Leu	Lys	Glu	
				215					220					225	
Trp	Leu	Glu	Asn	Ile	Pro	Lys	Asn	Ala	Leu	Ile	Gly	Arg	Val	Val	
				230					235					240	
Cys	Glu	Ala	Pro	Thr	Arg	Leu	Gln	Gly	Lys	Asp	Leu	Asn	Glu	Thr	
				245					250					255	
Thr	Glu	Gln	Asp	Leu	Cys	Pro	Leu	Lys	Asn	Arg	Val	Asp	Ser	Ser	
				260					265					270	
Leu	Pro	Ala	Pro	Pro	Ala	Gln	Glu	Glu	Thr	Phe	Ala	Pro	Gly	Pro	
				275					280					285	
Leu	Pro	Thr	Pro	Phe	Lys	Thr	Asn	Gly	Gln	Glu	Asp	His	Ala	Thr	
				290					295					300	
Pro	Gly	Ser	Ala	Pro	Asn	Gly	Gly	Thr	Lys	Ile	Pro	Gly	Asn	Trp	
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Gln	Ile	Lys	Ile	Arg	Pro	Thr	Ala	Ala	Ile	Ala	Thr	Gly	Ser	Ser	
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Arg	Asn	Lys	Pro	Leu	Ala	Asn	Ser	Leu	Pro	Cys	Pro	Gly	Gly	Cys	
				335					340					345	
Ser	Cys	Asp	His	Ile	Pro	Gly	Ser	Gly	Leu	Lys	Met	Asn	Cys	Asn	
				350					355					360	
Asn	Arg	Asn	Val	Ser	Ser	Leu	Ala	Asp	Leu	Lys	Pro	Lys	Leu	Ser	
				365					370					375	
Asn	Val	Gln	Glu	Leu	Phe	Leu	Arg	Asp	Asn	Lys	Ile	His	Ser	Ile	
				380					385					390	
Arg	Lys	Ser	His	Phe	Val	Asp	Tyr	Lys	Asn	Leu	Ile	Leu	Leu	Asp	
				395					400					405	
Leu	Gly	Asn	Asn	Asn	Ile	Ala	Thr	Val	Glu	Asn	Asn	Thr	Phe	Lys	

				410					415					420
Asn	Leu	Leu	Asp	Leu	Arg	Trp	Leu	Tyr	Met	Asp	Ser	Asn	Tyr	Leu
				425					430					435
Asp	Thr	Leu	Ser	Arg	Glu	Lys	Phe	Ala	Gly	Leu	Gln	Asn	Leu	Glu
				440					445					450
Tyr	Leu	Asn	Val	Glu	Tyr	Asn	Ala	Ile	Gln	Leu	Ile	Leu	Pro	Gly
				455					460					465
Thr	Phe	Asn	Ala	Met	Pro	Lys	Leu	Arg	Ile	Leu	Ile	Leu	Asn	Asn
				470					475					480
Asn	Leu	Leu	Arg	Ser	Leu	Pro	Val	Asp	Val	Phe	Ala	Gly	Val	Ser
				485					490					495
Leu	Ser	Lys	Leu	Ser	Leu	His	Asn	Asn	Tyr	Phe	Met	Tyr	Leu	Pro
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Val	Ala	Gly	Val	Leu	Asp	Gln	Leu	Thr	Ser	Ile	Ile	Gln	Ile	Asp
				515					520					525
Leu	His	Gly	Asn	Pro	Trp	Glu	Cys	Ser	Cys	Thr	Ile	Val	Pro	Phe
				530					535					540
Lys	Gln	Trp	Ala	Glu	Arg	Leu	Gly	Ser	Glu	Val	Leu	Met	Ser	Asp
				545					550					555
Leu	Lys	Cys	Glu	Thr	Pro	Val	Asn	Phe	Phe	Arg	Lys	Asp	Phe	Met
				560					565					570
Leu	Leu	Ser	Asn	Asp	Glu	Ile	Cys	Pro	Gln	Leu	Tyr	Ala	Arg	Ile
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Ser	Pro	Thr	Leu	Thr	Ser	His	Ser	Lys	Asn	Ser	Thr	Gly	Leu	Ala
				590					595					600
Glu	Thr	Gly	Thr	His	Ser	Asn	Ser	Tyr	Leu	Asp	Thr	Ser	Arg	Val
				605					610					615
Ser	Ile	Ser	Val	Leu	Val	Pro	Gly	Leu	Leu	Leu	Val	Phe	Val	Thr
				620					625					630
Ser	Ala	Phe	Thr	Val	Val	Gly	Met	Leu	Val	Phe	Ile	Leu	Arg	Asn
				635					640					645
Arg	Lys	Arg	Ser	Lys	Arg	Arg	Asp	Ala	Asn	Ser	Ser	Ala	Ser	Glu
				650					655					660
Ile	Asn	Ser	Leu	Gln	Thr	Val	Cys	Asp	Ser	Ser	Tyr	Trp	His	Asn
				665					670					675
Gly	Pro	Tyr	Asn	Ala	Asp	Gly	Ala	His	Arg	Val	Tyr	Asp	Cys	Gly
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				695										

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<211> 2226
<212> DNA
<213> Homo Sapien

<400> 355
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cagttggggg gtccgtcggg agcgagggcg gaggggaagg gagggggaac 200
cgggttgggg aagccagctg tagagggcgg tgaccgcgct ccagacacag 250
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ggggcctcag agaatgaggc cggcgttcgc cctgtgcctc ctctggcagg 350
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ccgtgccgca gagaacatgg ccaatcaggg tcgacgagaa gctgggagag 1300

Leu	Leu	Arg	Ala	Gly	Pro	Gly	Pro	Gly	Gly	Gly	Ser	Lys	Asp	Leu	80	85	90
Leu	Phe	Trp	Val	Ala	Leu	Glu	Arg	Arg	Arg	Ser	His	Cys	Thr	Leu	95	100	105
Glu	Asn	Glu	Pro	Leu	Arg	Gly	Phe	Ser	Trp	Leu	Ser	Ser	Asp	Pro	110	115	120
Gly	Gly	Leu	Glu	Ser	Asp	Thr	Leu	Gln	Trp	Val	Glu	Glu	Pro	Gln	125	130	135
Arg	Ser	Cys	Thr	Ala	Arg	Arg	Cys	Ala	Val	Leu	Gln	Ala	Thr	Gly	140	145	150
Gly	Val	Glu	Pro	Ala	Gly	Trp	Lys	Glu	Met	Arg	Cys	His	Leu	Arg	155	160	165
Ala	Asn	Gly	Tyr	Leu	Cys	Lys	Tyr	Gln	Phe	Glu	Val	Leu	Cys	Pro	170	175	180
Ala	Pro	Arg	Pro	Gly	Ala	Ala	Ser	Asn	Leu	Ser	Tyr	Arg	Ala	Pro	185	190	195
Phe	Gln	Leu	His	Ser	Ala	Ala	Leu	Asp	Phe	Ser	Pro	Pro	Gly	Thr	200	205	210
Glu	Val	Ser	Ala	Leu	Cys	Arg	Gly	Gln	Leu	Pro	Ile	Ser	Val	Thr	215	220	225
Cys	Ile	Ala	Asp	Glu	Ile	Gly	Ala	Arg	Trp	Asp	Lys	Leu	Ser	Gly	230	235	240
Asp	Val	Leu	Cys	Pro	Cys	Pro	Gly	Arg	Tyr	Leu	Arg	Ala	Gly	Lys	245	250	255
Cys	Ala	Glu	Leu	Pro	Asn	Cys	Leu	Asp	Asp	Leu	Gly	Gly	Phe	Ala	260	265	270
Cys	Glu	Cys	Ala	Thr	Gly	Phe	Glu	Leu	Gly	Lys	Asp	Gly	Arg	Ser	275	280	285
Cys	Val	Thr	Ser	Gly	Glu	Gly	Gln	Pro	Thr	Leu	Gly	Gly	Thr	Gly	290	295	300
Val	Pro	Thr	Arg	Arg	Pro	Pro	Ala	Thr	Ala	Thr	Ser	Pro	Val	Pro	305	310	315
Gln	Arg	Thr	Trp	Pro	Ile	Arg	Val	Asp	Glu	Lys	Leu	Gly	Glu	Thr	320	325	330
Pro	Leu	Val	Pro	Glu	Gln	Asp	Asn	Ser	Val	Thr	Ser	Ile	Pro	Glu	335	340	345
Ile	Pro	Arg	Trp	Gly	Ser	Gln	Ser	Thr	Met	Ser	Thr	Leu	Gln	Met	350	355	360
Ser	Leu	Gln	Ala	Glu	Ser	Lys	Ala	Thr	Ile	Thr	Pro	Ser	Gly	Ser			

	365		370		375
Val Ile Ser Lys Phe Asn Ser Thr Thr Ser Ser Ala Thr Pro Gln					
	380		385		390
Ala Phe Asp Ser Ser Ser Ala Val Val Phe Ile Phe Val Ser Thr					
	395		400		405
Ala Val Val Val Leu Val Ile Leu Thr Met Thr Val Leu Gly Leu					
	410		415		420
Val Lys Leu Cys Phe His Glu Ser Pro Ser Ser Gln Pro Arg Lys					
	425		430		435
Glu Ser Met Gly Pro Pro Gly Leu Glu Ser Asp Pro Glu Pro Ala					
	440		445		450
Ala Leu Gly Ser Ser Ser Ala His Cys Thr Asn Asn Gly Val Lys					
	455		460		465
Val Gly Asp Cys Asp Leu Arg Asp Arg Ala Glu Gly Ala Leu Leu					
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Ala Glu Ser Pro Leu Gly Ser Ser Asp Ala					
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Pro	Lys	Thr	Leu	Pro	Cys	Asp	Val	Thr	Leu	Asp	Val	Pro	Lys	Asn					
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His	Val	Ile	Val	Asp	Cys	Thr	Asp	Lys	His	Leu	Thr	Glu	Ile	Pro					
50										55					60				
Gly	Gly	Ile	Pro	Thr	Asn	Thr	Thr	Asn	Leu	Thr	Leu	Thr	Ile	Asn					
65										70					75				
His	Ile	Pro	Asp	Ile	Ser	Pro	Ala	Ser	Phe	His	Arg	Leu	Asp	His					
80										85					90				
Leu	Val	Glu	Ile	Asp	Phe	Arg	Cys	Asn	Cys	Val	Pro	Ile	Pro	Leu					
95										100					105				
Gly	Ser	Lys	Asn	Asn	Met	Cys	Ile	Lys	Arg	Leu	Gln	Ile	Lys	Pro					
110										115					120				
Arg	Ser	Phe	Ser	Gly	Leu	Thr	Tyr	Leu	Lys	Ser	Leu	Tyr	Leu	Asp					
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Gly	Asn	Gln	Leu	Leu	Glu	Ile	Pro	Gln	Gly	Leu	Pro	Pro	Ser	Leu					
140										145					150				
Gln	Leu	Leu	Ser	Leu	Glu	Ala	Asn	Asn	Ile	Phe	Ser	Ile	Arg	Lys					
155										160					165				
Glu	Asn	Leu	Thr	Glu	Leu	Ala	Asn	Ile	Glu	Ile	Leu	Tyr	Leu	Gly					
170										175					180				
Gln	Asn	Cys	Tyr	Tyr	Arg	Asn	Pro	Cys	Tyr	Val	Ser	Tyr	Ser	Ile					
185										190					195				
Glu	Lys	Asp	Ala	Phe	Leu	Asn	Leu	Thr	Lys	Leu	Lys	Val	Leu	Ser					
200										205					210				
Leu	Lys	Asp	Asn	Asn	Val	Thr	Ala	Val	Pro	Thr	Val	Leu	Pro	Ser					
215										220					225				
Thr	Leu	Thr	Glu	Leu	Tyr	Leu	Tyr	Asn	Asn	Met	Ile	Ala	Lys	Ile					
230										235					240				
Gln	Glu	Asp	Asp	Phe	Asn	Asn	Leu	Asn	Gln	Leu	Gln	Ile	Leu	Asp					
245										250					255				
Leu	Ser	Gly	Asn	Cys	Pro	Arg	Cys	Tyr	Asn	Ala	Pro	Phe	Pro	Cys					
260										265					270				
Ala	Pro	Cys	Lys	Asn	Asn	Ser	Pro	Leu	Gln	Ile	Pro	Val	Asn	Ala					
275										280					285				
Phe	Asp	Ala	Leu	Thr	Glu	Leu	Lys	Val	Leu	Arg	Leu	His	Ser	Asn					
290										295					300				
Ser	Leu	Gln	His	Val	Pro	Pro	Arg	Trp	Phe	Lys	Asn	Ile	Asn	Lys					
305										310					315				

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Gly	Asp	Ala	Lys	Phe	Leu	His	Phe	Leu	Pro	Ser	Leu	Ile	Gln	Leu
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Asp	Leu	Ser	Phe	Asn	Phe	Glu	Leu	Gln	Val	Tyr	Arg	Ala	Ser	Met
				350					355					360
Asn	Leu	Ser	Gln	Ala	Phe	Ser	Ser	Leu	Lys	Ser	Leu	Lys	Ile	Leu
				365					370					375
Arg	Ile	Arg	Gly	Tyr	Val	Phe	Lys	Glu	Leu	Lys	Ser	Phe	Asn	Leu
				380					385					390
Ser	Pro	Leu	His	Asn	Leu	Gln	Asn	Leu	Glu	Val	Leu	Asp	Leu	Gly
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Thr	Asn	Phe	Ile	Lys	Ile	Ala	Asn	Leu	Ser	Met	Phe	Lys	Gln	Phe
				410					415					420
Lys	Arg	Leu	Lys	Val	Ile	Asp	Leu	Ser	Val	Asn	Lys	Ile	Ser	Pro
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Ser	Gly	Asp	Ser	Ser	Glu	Val	Gly	Phe	Cys	Ser	Asn	Ala	Arg	Thr
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Ser	Val	Glu	Ser	Tyr	Glu	Pro	Gln	Val	Leu	Glu	Gln	Leu	His	Tyr
				455					460					465
Phe	Arg	Tyr	Asp	Lys	Tyr	Ala	Arg	Ser	Cys	Arg	Phe	Lys	Asn	Lys
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Glu	Ala	Ser	Phe	Met	Ser	Val	Asn	Glu	Ser	Cys	Tyr	Lys	Tyr	Gly
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Gln	Thr	Leu	Asp	Leu	Ser	Lys	Asn	Ser	Ile	Phe	Phe	Val	Lys	Ser
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Ser	Asp	Phe	Gln	His	Leu	Ser	Phe	Leu	Lys	Cys	Leu	Asn	Leu	Ser
				515					520					525
Gly	Asn	Leu	Ile	Ser	Gln	Thr	Leu	Asn	Gly	Ser	Glu	Phe	Gln	Pro
				530					535					540
Leu	Ala	Glu	Leu	Arg	Tyr	Leu	Asp	Phe	Ser	Asn	Asn	Arg	Leu	Asp
				545					550					555
Leu	Leu	His	Ser	Thr	Ala	Phe	Glu	Glu	Leu	His	Lys	Leu	Glu	Val
				560					565					570
Leu	Asp	Ile	Ser	Ser	Asn	Ser	His	Tyr	Phe	Gln	Ser	Glu	Gly	Ile
				575					580					585
Thr	His	Met	Leu	Asn	Phe	Thr	Lys	Asn	Leu	Lys	Val	Leu	Gln	Lys
				590					595					600
Leu	Met	Met	Asn	Asp	Asn	Asp	Ile	Ser	Ser	Ser	Thr	Ser	Arg	Thr

				605					610					615
Met	Glu	Ser	Glu	Ser	Leu	Arg	Thr	Leu	Glu	Phe	Arg	Gly	Asn	His
				620					625					630
Leu	Asp	Val	Leu	Trp	Arg	Glu	Gly	Asp	Asn	Arg	Tyr	Leu	Gln	Leu
				635					640					645
Phe	Lys	Asn	Leu	Leu	Lys	Leu	Glu	Glu	Leu	Asp	Ile	Ser	Lys	Asn
				650					655					660
Ser	Leu	Ser	Phe	Leu	Pro	Ser	Gly	Val	Phe	Asp	Gly	Met	Pro	Pro
				665					670					675
Asn	Leu	Lys	Asn	Leu	Ser	Leu	Ala	Lys	Asn	Gly	Leu	Lys	Ser	Phe
				680					685					690
Ser	Trp	Lys	Lys	Leu	Gln	Cys	Leu	Lys	Asn	Leu	Glu	Thr	Leu	Asp
				695					700					705
Leu	Ser	His	Asn	Gln	Leu	Thr	Thr	Val	Pro	Glu	Arg	Leu	Ser	Asn
				710					715					720
Cys	Ser	Arg	Ser	Leu	Lys	Asn	Leu	Ile	Leu	Lys	Asn	Asn	Gln	Ile
				725					730					735
Arg	Ser	Leu	Thr	Lys	Tyr	Phe	Leu	Gln	Asp	Ala	Phe	Gln	Leu	Arg
				740					745					750
Tyr	Leu	Asp	Leu	Ser	Ser	Asn	Lys	Ile	Gln	Met	Ile	Gln	Lys	Thr
				755					760					765
Ser	Phe	Pro	Glu	Asn	Val	Leu	Asn	Asn	Leu	Lys	Met	Leu	Leu	Leu
				770					775					780
His	His	Asn	Arg	Phe	Leu	Cys	Thr	Cys	Asp	Ala	Val	Trp	Phe	Val
				785					790					795
Trp	Trp	Val	Asn	His	Thr	Glu	Val	Thr	Ile	Pro	Tyr	Leu	Ala	Thr
				800					805					810
Asp	Val	Thr	Cys	Val	Gly	Pro	Gly	Ala	His	Lys	Gly	Gln	Ser	Val
				815					820					825
Ile	Ser	Leu	Asp	Leu	Tyr	Thr	Cys	Glu	Leu	Asp	Leu	Thr	Asn	Leu
				830					835					840
Ile	Leu	Phe	Ser	Leu	Ser	Ile	Ser	Val	Ser	Leu	Phe	Leu	Met	Val
				845					850					855
Met	Met	Thr	Ala	Ser	His	Leu	Tyr	Phe	Trp	Asp	Val	Trp	Tyr	Ile
				860					865					870
Tyr	His	Phe	Cys	Lys	Ala	Lys	Ile	Lys	Gly	Tyr	Gln	Arg	Leu	Ile
				875					880					885
Ser	Pro	Asp	Cys	Cys	Tyr	Asp	Ala	Phe	Ile	Val	Tyr	Asp	Thr	Lys
				890					895					900

Asp	Pro	Ala	Val	Thr	Glu	Trp	Val	Leu	Ala	Glu	Leu	Val	Ala	Lys	905	910	915
Leu	Glu	Asp	Pro	Arg	Glu	Lys	His	Phe	Asn	Leu	Cys	Leu	Glu	Glu	920	925	930
Arg	Asp	Trp	Leu	Pro	Gly	Gln	Pro	Val	Leu	Glu	Asn	Leu	Ser	Gln	935	940	945
Ser	Ile	Gln	Leu	Ser	Lys	Lys	Thr	Val	Phe	Val	Met	Thr	Asp	Lys	950	955	960
Tyr	Ala	Lys	Thr	Glu	Asn	Phe	Lys	Ile	Ala	Phe	Tyr	Leu	Ser	His	965	970	975
Gln	Arg	Leu	Met	Asp	Glu	Lys	Val	Asp	Val	Ile	Ile	Leu	Ile	Phe	980	985	990
Leu	Glu	Lys	Pro	Phe	Gln	Lys	Ser	Lys	Phe	Leu	Gln	Leu	Arg	Lys	995	1000	1005
Arg	Leu	Cys	Gly	Ser	Ser	Val	Leu	Glu	Trp	Pro	Thr	Asn	Pro	Gln	1010	1015	1020
Ala	His	Pro	Tyr	Phe	Trp	Gln	Cys	Leu	Lys	Asn	Ala	Leu	Ala	Thr	1025	1030	1035
Asp	Asn	His	Val	Ala	Tyr	Ser	Gln	Val	Phe	Lys	Glu	Thr	Val		1040	1045	

<210> 359
 <211> 1875
 <212> DNA
 <213> Homo Sapien

<400> 359
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 agatgaggag aaacgtttga tggaggagct gcacaacctc taccgggccc 150
 aggtatcccc gacggcctca gacatgctgc acatgagatg ggacgaggag 200
 ctggccgcct tcgccaaggc ctacgcacgg cagtgcgtgt ggggccacaa 250
 caaggagcgc gggcgccgcg gcgagaatct gtgcgccatc acagacgagg 300
 gcatggacgt gccgctggcc atggaggagt ggcaccacga gcgtgagcac 350
 tacaacctca gcgccgccac ctgcagccca ggccagatgt gcggccacta 400
 cacgcaggtg gtatgggcca agacagagag gatcggctgt ggttcccact 450
 tctgtgagaa gctccagggt gttgaggaga ccaacatcga attactggtg 500
 tgcaactatg agcctccggg gaacgtgaag gggaaacggc cctaccagga 550

ggggactccg tgctcccaat gtccctctgg ctaccactgc aagaactccc 600
 tctgtgaacc catcggaagc ccggaagatg ctcaggattt gccttacctg 650
 gtaactgagg ccccatcctt ccgggcgact gaagcatcag actctaggaa 700
 aatgggtact ctttcttccc tagcaacggg gattccggct ttcttggtaa 750
 cagaggtctc aggctccctg gcaaccaagg ctctgcctgc tgtggaaacc 800
 caggcccca cttccttagc aacgaaagac ccgccctcca tggcaacaga 850
 ggctccacct tgcgtaacaa ctgagggtccc ttccattttg gcagctcaca 900
 gcctgccctc cttggatgag gagccagtta ctttcccca atcgacccat 950
 gtctctatcc caaatcagc agacaaagt acagacaaaa caaaagtgcc 1000
 ctctaggagc ccagagaact ctctggaccc caagatgtcc ctgacagggg 1050
 caagggaact cctaccccat gccaggagg aggctgaggc tgaggctgag 1100
 ttgcctcctt ccagtgaggt cttggcctca gtttttccag ccaggacaa 1150
 gccagggtgag ctgcaggcca cactggacca cacggggcac acctcctcca 1200
 agtccctgcc caatttcccc aatacctctg ccaccgctaa tgccacgggt 1250
 gggcgtgccc tggtcttgca gtcgtccttg ccagggtgag agggccctga 1300
 caagcctagc gttgtgtcag ggctgaactc gggccctggc catgtgtggg 1350
 gccctctcct gggactactg ctctgcctc ctctgggtgt ggctggaatc 1400
 ttctgaatgg gataccactc aaagggtgaa gaggtcagct gtctcctgt 1450
 catcttcccc acctgtccc cagcccctaa acaagatact tcttggttaa 1500
 ggcctccgg aagggaagg ctacggggca tgtgcctcat cacaccatcc 1550
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 ggactgcaca ccgggcccac acctctcctg cccctcctc ctgagtcctg 1650
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 tgccacaca gcatgtgcgc tctccctgag tgctgtgta gctggggatg 1750
 gggattccta ggggcagatg aaggacaagc cccactggag tggggttctt 1800
 tgagtggggg aggcaggagc gagggaagga aagtaactcc tgactctcca 1850
 ataaaaacct gtccaacctg tgaaa 1875

<210> 360

<211> 463

<212> PRT

<213> Homo Sapien

<400> 360

Met	His	Gly	Ser	Cys	Ser	Phe	Leu	Met	Leu	Leu	Leu	Pro	Leu	Leu	
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Leu	Leu	Leu	Val	Ala	Thr	Thr	Gly	Pro	Val	Gly	Ala	Leu	Thr	Asp	
				20					25					30	
Glu	Glu	Lys	Arg	Leu	Met	Val	Glu	Leu	His	Asn	Leu	Tyr	Arg	Ala	
				35					40					45	
Gln	Val	Ser	Pro	Thr	Ala	Ser	Asp	Met	Leu	His	Met	Arg	Trp	Asp	
				50					55					60	
Glu	Glu	Leu	Ala	Ala	Phe	Ala	Lys	Ala	Tyr	Ala	Arg	Gln	Cys	Val	
				65					70					75	
Trp	Gly	His	Asn	Lys	Glu	Arg	Gly	Arg	Arg	Gly	Glu	Asn	Leu	Phe	
				80					85					90	
Ala	Ile	Thr	Asp	Glu	Gly	Met	Asp	Val	Pro	Leu	Ala	Met	Glu	Glu	
				95					100					105	
Trp	His	His	Glu	Arg	Glu	His	Tyr	Asn	Leu	Ser	Ala	Ala	Thr	Cys	
				110					115					120	
Ser	Pro	Gly	Gln	Met	Cys	Gly	His	Tyr	Thr	Gln	Val	Val	Trp	Ala	
				125					130					135	
Lys	Thr	Glu	Arg	Ile	Gly	Cys	Gly	Ser	His	Phe	Cys	Glu	Lys	Leu	
				140					145					150	
Gln	Gly	Val	Glu	Glu	Thr	Asn	Ile	Glu	Leu	Leu	Val	Cys	Asn	Tyr	
				155					160					165	
Glu	Pro	Pro	Gly	Asn	Val	Lys	Gly	Lys	Arg	Pro	Tyr	Gln	Glu	Gly	
				170					175					180	
Thr	Pro	Cys	Ser	Gln	Cys	Pro	Ser	Gly	Tyr	His	Cys	Lys	Asn	Ser	
				185					190					195	
Leu	Cys	Glu	Pro	Ile	Gly	Ser	Pro	Glu	Asp	Ala	Gln	Asp	Leu	Pro	
				200					205					210	
Tyr	Leu	Val	Thr	Glu	Ala	Pro	Ser	Phe	Arg	Ala	Thr	Glu	Ala	Ser	
				215					220					225	
Asp	Ser	Arg	Lys	Met	Gly	Thr	Pro	Ser	Ser	Leu	Ala	Thr	Gly	Ile	
				230					235					240	
Pro	Ala	Phe	Leu	Val	Thr	Glu	Val	Ser	Gly	Ser	Leu	Ala	Thr	Lys	
				245					250					255	
Ala	Leu	Pro	Ala	Val	Glu	Thr	Gln	Ala	Pro	Thr	Ser	Leu	Ala	Thr	
				260					265					270	
Lys	Asp	Pro	Pro	Ser	Met	Ala	Thr	Glu	Ala	Pro	Pro	Cys	Val	Thr	
				275					280					285	

Thr	Glu	Val	Pro	Ser	Ile	Leu	Ala	Ala	His	Ser	Leu	Pro	Ser	Leu	
				290					295					300	
Asp	Glu	Glu	Pro	Val	Thr	Phe	Pro	Lys	Ser	Thr	His	Val	Pro	Ile	
				305					310					315	
Pro	Lys	Ser	Ala	Asp	Lys	Val	Thr	Asp	Lys	Thr	Lys	Val	Pro	Ser	
				320					325					330	
Arg	Ser	Pro	Glu	Asn	Ser	Leu	Asp	Pro	Lys	Met	Ser	Leu	Thr	Gly	
				335					340					345	
Ala	Arg	Glu	Leu	Leu	Pro	His	Ala	Gln	Glu	Glu	Ala	Glu	Ala	Glu	
				350					355					360	
Ala	Glu	Leu	Pro	Pro	Ser	Ser	Glu	Val	Leu	Ala	Ser	Val	Phe	Pro	
				365					370					375	
Ala	Gln	Asp	Lys	Pro	Gly	Glu	Leu	Gln	Ala	Thr	Leu	Asp	His	Thr	
				380					385					390	
Gly	His	Thr	Ser	Ser	Lys	Ser	Leu	Pro	Asn	Phe	Pro	Asn	Thr	Ser	
				395					400					405	
Ala	Thr	Ala	Asn	Ala	Thr	Gly	Gly	Arg	Ala	Leu	Ala	Leu	Gln	Ser	
				410					415					420	
Ser	Leu	Pro	Gly	Ala	Glu	Gly	Pro	Asp	Lys	Pro	Ser	Val	Val	Ser	
				425					430					435	
Gly	Leu	Asn	Ser	Gly	Pro	Gly	His	Val	Trp	Gly	Pro	Leu	Leu	Gly	
				440					445					450	
Leu	Leu	Leu	Leu	Pro	Pro	Leu	Val	Leu	Ala	Gly	Ile	Phe			
				455					460						

<210> 361
 <211> 1377
 <212> DNA
 <213> Homo Sapien

<400> 361
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 gaaccaggac tggggtgacg gcagggcagg gggcgcttg ccggggagaa 100
 gcgcgggggc tggagcacca ccaactggag ggtccggagt agcgagcgcc 150
 ccgaaggagg ccatcgggga gccgggaggg gggactgca gaggaccccg 200
 gcgtccgggc tcccgggtgcc agcgctatga ggccactcct cgtcctgctg 250
 ctctggggcc tggcggccgg ctgccecca ctggacgaca acaagatccc 300
 cagcctctgc ccggggcacc ccggccttcc aggcacgccg ggccaccatg 350
 gcagccaggg cttgccgggc cgcatggcc gcgacggccg cgacggcgcg 400

cccgggggctc cgggagagaa aggcgagggc gggaggccgg gactgccggg 450
 acctcgaggg gaccccgggc cgcgaggaga ggcgggaccc gcggggccca 500
 ccgggcctgc cggggagtgc tcgggtgcctc cgcgatccgc cttcagcgcc 550
 aagcgctccg agagccgggt gcctccgccg tctgacgcac ccttgccctt 600
 cgaccgcgtg ctggtgaacg agcagggaca ttacgacgcc gtcaccggca 650
 agttcacctg ccaggtgcct ggggtctact acttcgccgt ccatgccacc 700
 gtctaccggg ccagcctgca gtttgatctg gtgaagaatg gcgaatccat 750
 tgctcttttc ttccagtttt tcgggggggtg gcccaagcca gcctcgctct 800
 cggggggggc catggtgagg ctggagcctg aggaccaagt gtgggtgcag 850
 gtgggtgtgg gtgactacat tggcatctat gccagcatca agacagacag 900
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 ttgcttagtg cccactgcaa agtgagctca tgctctcact cctagaagga 1000
 ggggtgtgagg ctgacaacca ggtcatccag gagggctggc ccccctggaa 1050
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 ggcaaggaat gggaacagtg gctgtctgcg atcaggtctg gcagcatggg 1150
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 gtgtaagtcc cccagttgct ctggtccagg agcccacggg ggggtgctct 1250
 cttcctggtc ctctgcttct ctggatcctc cccaccccct cctgctcctg 1300
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 aaaaaaaaaa aaaaaaaaaa aaaaaaa 1377

<210> 362
 <211> 243
 <212> PRT
 <213> Homo Sapien

<400> 362
 Met Arg Pro Leu Leu Val Leu Leu Leu Leu Gly Leu Ala Ala Gly
 1 5 10 15
 Ser Pro Pro Leu Asp Asp Asn Lys Ile Pro Ser Leu Cys Pro Gly
 20 25 30
 His Pro Gly Leu Pro Gly Thr Pro Gly His His Gly Ser Gln Gly
 35 40 45
 Leu Pro Gly Arg Asp Gly Arg Asp Gly Arg Asp Gly Ala Pro Gly
 50 55 60

Ala	Pro	Gly	Glu	Lys	Gly	Glu	Gly	Gly	Arg	Pro	Gly	Leu	Pro	Gly	
				65					70					75	
Pro	Arg	Gly	Asp	Pro	Gly	Pro	Arg	Gly	Glu	Ala	Gly	Pro	Ala	Gly	
				80					85					90	
Pro	Thr	Gly	Pro	Ala	Gly	Glu	Cys	Ser	Val	Pro	Pro	Arg	Ser	Ala	
				95					100					105	
Phe	Ser	Ala	Lys	Arg	Ser	Glu	Ser	Arg	Val	Pro	Pro	Pro	Ser	Asp	
				110					115					120	
Ala	Pro	Leu	Pro	Phe	Asp	Arg	Val	Leu	Val	Asn	Glu	Gln	Gly	His	
				125					130					135	
Tyr	Asp	Ala	Val	Thr	Gly	Lys	Phe	Thr	Cys	Gln	Val	Pro	Gly	Val	
				140					145					150	
Tyr	Tyr	Phe	Ala	Val	His	Ala	Thr	Val	Tyr	Arg	Ala	Ser	Leu	Gln	
				155					160					165	
Phe	Asp	Leu	Val	Lys	Asn	Gly	Glu	Ser	Ile	Ala	Ser	Phe	Phe	Gln	
				170					175					180	
Phe	Phe	Gly	Gly	Trp	Pro	Lys	Pro	Ala	Ser	Leu	Ser	Gly	Gly	Ala	
				185					190					195	
Met	Val	Arg	Leu	Glu	Pro	Glu	Asp	Gln	Val	Trp	Val	Gln	Val	Gly	
				200					205					210	
Val	Gly	Asp	Tyr	Ile	Gly	Ile	Tyr	Ala	Ser	Ile	Lys	Thr	Asp	Ser	
				215					220					225	
Thr	Phe	Ser	Gly	Phe	Leu	Val	Tyr	Ser	Asp	Trp	His	Ser	Ser	Pro	
				230					235					240	
Val	Phe	Ala													

<210> 363
 <211> 1503
 <212> DNA
 <213> Homo Sapien

<400> 363
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 tccccagacg caggccctca tggccagggg aggggtgcacc aggcggcccc 150
 cctgagcgac gctccccatg atgacgcca cggaacttc cagtacgacc 200
 atgaggcttt cctgggacgg gaagtggcca aggaattcga ccaactcacc 250
 ccagaggaaa gccaggcccg tctggggcgg atcgtggacc gcatggaccg 300
 cgcgggggac ggcgacggct ggggtgtcgt ggccgagctt cgcgcgtgga 350

tcgcgcacac gcagcagcgg cacatacggg actcgggtgag cgcggcctgg 400
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aggatgcaga gacctacaaa aagatgctgg ctcgggacga gcggcgtttc 550
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agccttcctg caccgagagg agttccctca catgcgggac atcgtgattg 650
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cggcaccacg atgagctgtg agcaccgcgc acctgccaca gcctcagagg 1050
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aagaaccgcc ccaaccctc cagctccaaa tctgagcctc caccacatag 1350
actgaaactc ccctggcccc agcctctctc tgctggcct ggctgggac 1400
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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1500
aaa 1503

<210> 364
<211> 328
<212> PRT
<213> Homo Sapien

<400> 364
Met Met Trp Arg Pro Ser Val Leu Leu Leu Leu Leu Leu Arg
1 5 10 15
His Gly Ala Gln Gly Lys Pro Ser Pro Asp Ala Gly Pro His Gly

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Gln	Gly	Arg	Val	His	Gln	Ala	Ala	Pro	Leu	Ser	Asp	Ala	Pro	His			
				35					40					45			
Asp	Asp	Ala	His	Gly	Asn	Phe	Gln	Tyr	Asp	His	Glu	Ala	Phe	Leu			
				50					55					60			
Gly	Arg	Glu	Val	Ala	Lys	Glu	Phe	Asp	Gln	Leu	Thr	Pro	Glu	Glu			
				65					70					75			
Ser	Gln	Ala	Arg	Leu	Gly	Arg	Ile	Val	Asp	Arg	Met	Asp	Arg	Ala			
				80					85					90			
Gly	Asp	Gly	Asp	Gly	Trp	Val	Ser	Leu	Ala	Glu	Leu	Arg	Ala	Trp			
				95					100					105			
Ile	Ala	His	Thr	Gln	Gln	Arg	His	Ile	Arg	Asp	Ser	Val	Ser	Ala			
				110					115					120			
Ala	Trp	Asp	Thr	Tyr	Asp	Thr	Asp	Arg	Asp	Gly	Arg	Val	Gly	Trp			
				125					130					135			
Glu	Glu	Leu	Arg	Asn	Ala	Thr	Tyr	Gly	His	Tyr	Ala	Pro	Gly	Glu			
				140					145					150			
Glu	Phe	His	Asp	Val	Glu	Asp	Ala	Glu	Thr	Tyr	Lys	Lys	Met	Leu			
				155					160					165			
Ala	Arg	Asp	Glu	Arg	Arg	Phe	Arg	Val	Ala	Asp	Gln	Asp	Gly	Asp			
				170					175					180			
Ser	Met	Ala	Thr	Arg	Glu	Glu	Leu	Thr	Ala	Phe	Leu	His	Pro	Glu			
				185					190					195			
Glu	Phe	Pro	His	Met	Arg	Asp	Ile	Val	Ile	Ala	Glu	Thr	Leu	Glu			
				200					205					210			
Asp	Leu	Asp	Arg	Asn	Lys	Asp	Gly	Tyr	Val	Gln	Val	Glu	Glu	Tyr			
				215					220					225			
Ile	Ala	Asp	Leu	Tyr	Ser	Ala	Glu	Pro	Gly	Glu	Glu	Glu	Pro	Ala			
				230					235					240			
Trp	Val	Gln	Thr	Glu	Arg	Gln	Gln	Phe	Arg	Asp	Phe	Arg	Asp	Leu			
				245					250					255			
Asn	Lys	Asp	Gly	His	Leu	Asp	Gly	Ser	Glu	Val	Gly	His	Trp	Val			
				260					265					270			
Leu	Pro	Pro	Ala	Gln	Asp	Gln	Pro	Leu	Val	Glu	Ala	Asn	His	Leu			
				275					280					285			
Leu	His	Glu	Ser	Asp	Thr	Asp	Lys	Asp	Gly	Arg	Leu	Ser	Lys	Ala			
				290					295					300			
Glu	Ile	Leu	Gly	Asn	Trp	Asn	Met	Phe	Val	Gly	Ser	Gln	Ala	Thr			
				305					310					315			

Asn Tyr Gly Glu Asp Leu Thr Arg His His Asp Glu Leu
320 325

<210> 365
<211> 1857
<212> DNA
<213> Homo Sapien

<400> 365
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gatggggaca aaggcgcaag tcgagaggaa actgttgtgc ctcttcatat 100
tggcgatcct gttgtgctcc ctggcattgg gcagtgttac agtgcactct 150
tctgaacctg aagtcagaat tcctgagaat aatcctgtga agttgtcctg 200
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<210> 366
 <211> 299
 <212> PRT
 <213> Homo Sapien

<400> 366
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 35 40 45
 Val Lys Leu Ser Cys Ala Tyr Ser Gly Phe Ser Ser Pro Arg Val
 50 55 60
 Glu Trp Lys Phe Asp Gln Gly Asp Thr Thr Arg Leu Val Cys Tyr
 65 70 75
 Asn Asn Lys Ile Thr Ala Ser Tyr Glu Asp Arg Val Thr Phe Leu
 80 85 90
 Pro Thr Gly Ile Thr Phe Lys Ser Val Thr Arg Glu Asp Thr Gly
 95 100 105
 Thr Tyr Thr Cys Met Val Ser Glu Glu Gly Gly Asn Ser Tyr Gly
 110 115 120
 Glu Val Lys Val Lys Leu Ile Val Leu Val Pro Pro Ser Lys Pro
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Leu	Thr	Cys	Ser	Glu	Gln	Asp	Gly	Ser	Pro	Pro	Ser	Glu	Tyr	Thr
				155					160					165
Trp	Phe	Lys	Asp	Gly	Ile	Val	Met	Pro	Thr	Asn	Pro	Lys	Ser	Thr
				170					175					180
Arg	Ala	Phe	Ser	Asn	Ser	Ser	Tyr	Val	Leu	Asn	Pro	Thr	Thr	Gly
				185					190					195
Glu	Leu	Val	Phe	Asp	Pro	Leu	Ser	Ala	Ser	Asp	Thr	Gly	Glu	Tyr
				200					205					210
Ser	Cys	Glu	Ala	Arg	Asn	Gly	Tyr	Gly	Thr	Pro	Met	Thr	Ser	Asn
				215					220					225
Ala	Val	Arg	Met	Glu	Ala	Val	Glu	Arg	Asn	Val	Gly	Val	Ile	Val
				230					235					240
Ala	Ala	Val	Leu	Val	Thr	Leu	Ile	Leu	Leu	Gly	Ile	Leu	Val	Phe
				245					250					255
Gly	Ile	Trp	Phe	Ala	Tyr	Ser	Arg	Gly	His	Phe	Asp	Arg	Thr	Lys
				260					265					270
Lys	Gly	Thr	Ser	Ser	Lys	Lys	Val	Ile	Tyr	Ser	Gln	Pro	Ser	Ala
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Arg	Ser	Glu	Gly	Glu	Phe	Lys	Gln	Thr	Ser	Ser	Phe	Leu	Val	
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<210> 367
 <211> 2906
 <212> DNA
 <213> Homo Sapien

<400> 367
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 agaaaaaagt atgttcattt ttctctataa aggagaaagt gagccaagga 400
 gatatttttg gaatgaaaag tttggggcct ttttagtaaa gtaaagaact 450
 ggtgtggtgg tgttttcctt tctttttgaa tttcccacia gaggagagga 500

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aatgtcactg aaggcatggc agctgagctg aaatgtcggg cctccacatc 1950

cctgacatct gtatcttggg ttactccaaa tggaacagtc atgacacatg 2000
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 caaaaaacaa acaatcaaaa aaaaagacag tttattaaaa atgacacaaa 2800
 tgactgggct aaatctactg tttcaaaaaa gtgtctttac aaaaaacaa 2850
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<210> 368
 <211> 640
 <212> PRT
 <213> Homo Sapien

<400> 368
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 35 40 45
 Thr Cys Pro Ser Val Cys Ser Cys Ser Asn Gln Phe Ser Lys Val
 50 55 60

Ile	Cys	Val	Arg	Lys	Asn	Leu	Arg	Glu	Val	Pro	Asp	Gly	Ile	Ser	
				65					70					75	
Thr	Asn	Thr	Arg	Leu	Leu	Asn	Leu	His	Glu	Asn	Gln	Ile	Gln	Ile	
				80					85					90	
Ile	Lys	Val	Asn	Ser	Phe	Lys	His	Leu	Arg	His	Leu	Glu	Ile	Leu	
				95					100					105	
Gln	Leu	Ser	Arg	Asn	His	Ile	Arg	Thr	Ile	Glu	Ile	Gly	Ala	Phe	
				110					115					120	
Asn	Gly	Leu	Ala	Asn	Leu	Asn	Thr	Leu	Glu	Leu	Phe	Asp	Asn	Arg	
				125					130					135	
Leu	Thr	Thr	Ile	Pro	Asn	Gly	Ala	Phe	Val	Tyr	Leu	Ser	Lys	Leu	
				140					145					150	
Lys	Glu	Leu	Trp	Leu	Arg	Asn	Asn	Pro	Ile	Glu	Ser	Ile	Pro	Ser	
				155					160					165	
Tyr	Ala	Phe	Asn	Arg	Ile	Pro	Ser	Leu	Arg	Arg	Leu	Asp	Leu	Gly	
				170					175					180	
Glu	Leu	Lys	Arg	Leu	Ser	Tyr	Ile	Ser	Glu	Gly	Ala	Phe	Glu	Gly	
				185					190					195	
Leu	Ser	Asn	Leu	Arg	Tyr	Leu	Asn	Leu	Ala	Met	Cys	Asn	Leu	Arg	
				200					205					210	
Glu	Ile	Pro	Asn	Leu	Thr	Pro	Leu	Ile	Lys	Leu	Asp	Glu	Leu	Asp	
				215					220					225	
Leu	Ser	Gly	Asn	His	Leu	Ser	Ala	Ile	Arg	Pro	Gly	Ser	Phe	Gln	
				230					235					240	
Gly	Leu	Met	His	Leu	Gln	Lys	Leu	Trp	Met	Ile	Gln	Ser	Gln	Ile	
				245					250					255	
Gln	Val	Ile	Glu	Arg	Asn	Ala	Phe	Asp	Asn	Leu	Gln	Ser	Leu	Val	
				260					265					270	
Glu	Ile	Asn	Leu	Ala	His	Asn	Asn	Leu	Thr	Leu	Leu	Pro	His	Asp	
				275					280					285	
Leu	Phe	Thr	Pro	Leu	His	His	Leu	Glu	Arg	Ile	His	Leu	His	His	
				290					295					300	
Asn	Pro	Trp	Asn	Cys	Asn	Cys	Asp	Ile	Leu	Trp	Leu	Ser	Trp	Trp	
				305					310					315	
Ile	Lys	Asp	Met	Ala	Pro	Ser	Asn	Thr	Ala	Cys	Cys	Ala	Arg	Cys	
				320					325					330	
Asn	Thr	Pro	Pro	Asn	Leu	Lys	Gly	Arg	Tyr	Ile	Gly	Glu	Leu	Asp	
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Gln	Asn	Tyr	Phe	Thr	Cys	Tyr	Ala	Pro	Val	Ile	Val	Glu	Pro	Pro	

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Arg	Ala	Ser	Thr	Ser	Leu	Thr	Ser	Val	Ser	Trp	Ile	Thr	Pro	Asn	
				380					385					390	
Gly	Thr	Val	Met	Thr	His	Gly	Ala	Tyr	Lys	Val	Arg	Ile	Ala	Val	
				395					400					405	
Leu	Ser	Asp	Gly	Thr	Leu	Asn	Phe	Thr	Asn	Val	Thr	Val	Gln	Asp	
				410					415					420	
Thr	Gly	Met	Tyr	Thr	Cys	Met	Val	Ser	Asn	Ser	Val	Gly	Asn	Thr	
				425					430					435	
Thr	Ala	Ser	Ala	Thr	Leu	Asn	Val	Thr	Ala	Ala	Thr	Thr	Thr	Pro	
				440					445					450	
Phe	Ser	Tyr	Phe	Ser	Thr	Val	Thr	Val	Glu	Thr	Met	Glu	Pro	Ser	
				455					460					465	
Gln	Asp	Glu	Ala	Arg	Thr	Thr	Asp	Asn	Asn	Val	Gly	Pro	Thr	Pro	
				470					475					480	
Val	Val	Asp	Trp	Glu	Thr	Thr	Asn	Val	Thr	Thr	Ser	Leu	Thr	Pro	
				485					490					495	
Gln	Ser	Thr	Arg	Ser	Thr	Glu	Lys	Thr	Phe	Thr	Ile	Pro	Val	Thr	
				500					505					510	
Asp	Ile	Asn	Ser	Gly	Ile	Pro	Gly	Ile	Asp	Glu	Val	Met	Lys	Thr	
				515					520					525	
Thr	Lys	Ile	Ile	Ile	Gly	Cys	Phe	Val	Ala	Ile	Thr	Leu	Met	Ala	
				530					535					540	
Ala	Val	Met	Leu	Val	Ile	Phe	Tyr	Lys	Met	Arg	Lys	Gln	His	His	
				545					550					555	
Arg	Gln	Asn	His	His	Ala	Pro	Thr	Arg	Thr	Val	Glu	Ile	Ile	Asn	
				560					565					570	
Val	Asp	Asp	Glu	Ile	Thr	Gly	Asp	Thr	Pro	Met	Glu	Ser	His	Leu	
				575					580					585	
Pro	Met	Pro	Ala	Ile	Glu	His	Glu	His	Leu	Asn	His	Tyr	Asn	Ser	
				590					595					600	
Tyr	Lys	Ser	Pro	Phe	Asn	His	Thr	Thr	Thr	Val	Asn	Thr	Ile	Asn	
				605					610					615	
Ser	Ile	His	Ser	Ser	Val	His	Glu	Pro	Leu	Leu	Ile	Arg	Met	Asn	
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Ser	Lys	Asp	Asn	Val	Gln	Glu	Thr	Gln	Ile						
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<211> 3296
<212> DNA
<213> Homo Sapien

<400> 369

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<211> 642

<212> PRT

<213> Homo Sapien

<400> 370

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Trp	Arg	Pro	Gly	Ala	Ser	Asp	Ser	Ala	Pro	Pro	Ala	Gly	Thr	Met
			20						25					30
Ala	Gln	Ser	Arg	Val	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Pro	Pro	Gln
				35					40					45
Leu	His	Leu	Gly	Pro	Val	Leu	Ala	Val	Arg	Ala	Pro	Gly	Phe	Gly
				50					55					60
Arg	Ser	Gly	Gly	His	Ser	Leu	Ser	Pro	Glu	Glu	Asn	Glu	Phe	Ala
				65					70					75
Glu	Glu	Glu	Pro	Val	Leu	Val	Leu	Ser	Pro	Glu	Glu	Pro	Gly	Pro
				80					85					90
Gly	Pro	Ala	Ala	Val	Ser	Cys	Pro	Arg	Asp	Cys	Ala	Cys	Ser	Gln
				95					100					105
Glu	Gly	Val	Val	Asp	Cys	Gly	Gly	Ile	Asp	Leu	Arg	Glu	Phe	Pro
				110					115					120
Gly	Asp	Leu	Pro	Glu	His	Thr	Asn	His	Leu	Ser	Leu	Gln	Asn	Asn
				125					130					135
Gln	Leu	Glu	Lys	Ile	Tyr	Pro	Glu	Glu	Leu	Ser	Arg	Leu	His	Arg
				140					145					150

Leu	Glu	Thr	Leu	Asn	Leu	Gln	Asn	Asn	Arg	Leu	Thr	Ser	Arg	Gly	155	160	165
Leu	Pro	Glu	Lys	Ala	Phe	Glu	His	Leu	Thr	Asn	Leu	Asn	Tyr	Leu	170	175	180
Tyr	Leu	Ala	Asn	Asn	Lys	Leu	Thr	Leu	Ala	Pro	Arg	Phe	Leu	Pro	185	190	195
Asn	Ala	Leu	Ile	Ser	Val	Asp	Phe	Ala	Ala	Asn	Tyr	Leu	Thr	Lys	200	205	210
Ile	Tyr	Gly	Leu	Thr	Phe	Gly	Gln	Lys	Pro	Asn	Leu	Arg	Ser	Val	215	220	225
Tyr	Leu	His	Asn	Asn	Lys	Leu	Ala	Asp	Ala	Gly	Leu	Pro	Asp	Asn	230	235	240
Met	Phe	Asn	Gly	Ser	Ser	Asn	Val	Glu	Val	Leu	Ile	Leu	Ser	Ser	245	250	255
Asn	Phe	Leu	Arg	His	Val	Pro	Lys	His	Leu	Pro	Pro	Ala	Leu	Tyr	260	265	270
Lys	Leu	His	Leu	Lys	Asn	Asn	Lys	Leu	Glu	Lys	Ile	Pro	Pro	Gly	275	280	285
Ala	Phe	Ser	Glu	Leu	Ser	Ser	Leu	Arg	Glu	Leu	Tyr	Leu	Gln	Asn	290	295	300
Asn	Tyr	Leu	Thr	Asp	Glu	Gly	Leu	Asp	Asn	Glu	Thr	Phe	Trp	Lys	305	310	315
Leu	Ser	Ser	Leu	Glu	Tyr	Leu	Asp	Leu	Ser	Ser	Asn	Asn	Leu	Ser	320	325	330
Arg	Val	Pro	Ala	Gly	Leu	Pro	Arg	Ser	Leu	Val	Leu	Leu	His	Leu	335	340	345
Glu	Lys	Asn	Ala	Ile	Arg	Ser	Val	Asp	Ala	Asn	Val	Leu	Thr	Pro	350	355	360
Ile	Arg	Ser	Leu	Glu	Tyr	Leu	Leu	Leu	His	Ser	Asn	Gln	Leu	Arg	365	370	375
Glu	Gln	Gly	Ile	His	Pro	Leu	Ala	Phe	Gln	Gly	Leu	Lys	Arg	Leu	380	385	390
His	Thr	Val	His	Leu	Tyr	Asn	Asn	Ala	Leu	Glu	Arg	Val	Pro	Ser	395	400	405
Gly	Leu	Pro	Arg	Arg	Val	Arg	Thr	Leu	Met	Ile	Leu	His	Asn	Gln	410	415	420
Ile	Thr	Gly	Ile	Gly	Arg	Glu	Asp	Phe	Ala	Thr	Thr	Tyr	Phe	Leu	425	430	435
Glu	Glu	Leu	Asn	Leu	Ser	Tyr	Asn	Arg	Ile	Thr	Ser	Pro	Gln	Val			

	440		445		450
His Arg Asp Ala Phe Arg Lys Leu Arg	Leu Leu Arg Ser Leu Asp				
455	460			465	
Leu Ser Gly Asn Arg Leu His Thr Leu	Pro Pro Gly Leu Pro Arg				
470	475			480	
Asn Val His Val Leu Lys Val Lys Arg	Asn Glu Leu Ala Ala Leu				
485	490			495	
Ala Arg Gly Ala Leu Ala Gly Met Ala	Gln Leu Arg Glu Leu Tyr				
500	505			510	
Leu Thr Ser Asn Arg Leu Arg Ser Arg	Ala Leu Gly Pro Arg Ala				
515	520			525	
Trp Val Asp Leu Ala His Leu Gln Leu	Leu Asp Ile Ala Gly Asn				
530	535			540	
Gln Leu Thr Glu Ile Pro Glu Gly Leu	Pro Glu Ser Leu Glu Tyr				
545	550			555	
Leu Tyr Leu Gln Asn Asn Lys Ile Ser	Ala Val Pro Ala Asn Ala				
560	565			570	
Phe Asp Ser Thr Pro Asn Leu Lys Gly	Ile Phe Leu Arg Phe Asn				
575	580			585	
Lys Leu Ala Val Gly Ser Val Val Asp	Ser Ala Phe Arg Arg Leu				
590	595			600	
Lys His Leu Gln Val Leu Asp Ile Glu	Gly Asn Leu Glu Phe Gly				
605	610			615	
Asp Ile Ser Lys Asp Arg Gly Arg Leu	Gly Lys Glu Lys Glu Glu				
620	625			630	
Glu Glu Glu Glu Glu Glu Glu Glu Glu	Glu Thr Arg				
635	640				

<210> 371
 <211> 2849
 <212> DNA
 <213> Homo Sapien

<400> 371
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 tgccgtcctc cggaagacct tttcccctgc tctgtttcct tcaccgagtc 200
 tgtgcatcgc cccggacctg gccgggagga ggcttggccg gcgggagatg 250
 ctctagggggc ggcgcgggag gagcggccgg cgggacggag ggcccggcag 300

gaagatgggc tcccgtaggac agggactctt gctggcgtag tgccctgctcc 350
 ttgcctttgc ctctggcctg gtccctgagtc gtgtgccccca tgtccagggg 400
 gaacagcagg agtgggaggg gactgaggag ctgccgtcgc ctccggacca 450
 tgccgagagg gctgaagaac aacatgaaaa atacaggccc agtcaggacc 500
 aggggctccc tgcttcccgg tgcttgcgct gctgtgaccc cggtacctcc 550
 atgtacccgg cgaccgccgt gcccagatc aacatcacta tcttgaaagg 600
 ggagaagggt gaccgcggag atcgaggcct ccaagggaat tatggcaaaa 650
 caggctcagc agggggccagg ggccacactg gacccaaagg gcagaagggc 700
 tccatggggg cccctgggga gcggtgcaag agccactacg ccgccttttc 750
 ggtgggccgg aagaagccca tgcacagcaa ccactactac cagacggtga 800
 tcttcgacac ggagttcgtg aacctctacg accacttcaa catgttcacc 850
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 aggaggtggt gatcttggtc gcgcagggtg gcgaccgcag catcatgcaa 1000
 agccagagcc tgatgctgga gctgcgagag caggaccagg tgtgggtacg 1050
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 tgaccccacc gcctcttccc cgatccctgg actccgactc cctggctttg 1250
 gcattcagtg agacgccctg cacacacaga aagccaaagc gatcggtgct 1300
 cccagatccc gcagcctctg gagagagctg acggcagatg aaatcaccag 1350
 ggccggggcac ccgcgagaac cctctgggac cttccgcggc cctctctgca 1400
 cacatcctca agtgaccccg cacggcgaga cgcgggtggc ggcagggcgt 1450
 cccaggggtg gccaccgcgg ctccagtcct tggaaataat taggcaaatt 1500
 ctaaagggtc caaaaggagc aaagtaaacc gtggaggaca aagaaaaggg 1550
 ttgttatattt tgtctttcca gccagcctgc tggctcccaa gagagaggcc 1600
 ttttcagttg agactctgct taagagaaga tccaaagtta aagctctggg 1650
 gtcagggggg gggccggggg caggaaacta cctctggctt aattctttta 1700
 agccacgtag gaactttctt gagggatagg tggaccctga catccctgtg 1750

Pro	Pro	Asp	His	Ala	Glu	Arg	Ala	Glu	Glu	Gln	His	Glu	Lys	Tyr	50	55	60
Arg	Pro	Ser	Gln	Asp	Gln	Gly	Leu	Pro	Ala	Ser	Arg	Cys	Leu	Arg	65	70	75
Cys	Cys	Asp	Pro	Gly	Thr	Ser	Met	Tyr	Pro	Ala	Thr	Ala	Val	Pro	80	85	90
Gln	Ile	Asn	Ile	Thr	Ile	Leu	Lys	Gly	Glu	Lys	Gly	Asp	Arg	Gly	95	100	105
Asp	Arg	Gly	Leu	Gln	Gly	Lys	Tyr	Gly	Lys	Thr	Gly	Ser	Ala	Gly	110	115	120
Ala	Arg	Gly	His	Thr	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Ser	Met	Gly	125	130	135
Ala	Pro	Gly	Glu	Arg	Cys	Lys	Ser	His	Tyr	Ala	Ala	Phe	Ser	Val	140	145	150
Gly	Arg	Lys	Lys	Pro	Met	His	Ser	Asn	His	Tyr	Tyr	Gln	Thr	Val	155	160	165
Ile	Phe	Asp	Thr	Glu	Phe	Val	Asn	Leu	Tyr	Asp	His	Phe	Asn	Met	170	175	180
Phe	Thr	Gly	Lys	Phe	Tyr	Cys	Tyr	Val	Pro	Gly	Leu	Tyr	Phe	Phe	185	190	195
Ser	Leu	Asn	Val	His	Thr	Trp	Asn	Gln	Lys	Glu	Thr	Tyr	Leu	His	200	205	210
Ile	Met	Lys	Asn	Glu	Glu	Glu	Val	Val	Ile	Leu	Phe	Ala	Gln	Val	215	220	225
Gly	Asp	Arg	Ser	Ile	Met	Gln	Ser	Gln	Ser	Leu	Met	Leu	Glu	Leu	230	235	240
Arg	Glu	Gln	Asp	Gln	Val	Trp	Val	Arg	Leu	Tyr	Lys	Gly	Glu	Arg	245	250	255
Glu	Asn	Ala	Ile	Phe	Ser	Glu	Glu	Leu	Asp	Thr	Tyr	Ile	Thr	Phe	260	265	270
Ser	Gly	Tyr	Leu	Val	Lys	His	Ala	Thr	Glu	Pro					275	280	

<210> 373
 <211> 1572
 <212> DNA
 <213> Homo Sapien

<400> 373
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attaaagtga aagttgaaaa at 1572

<210> 374

<211> 318

<212> PRT

<213> Homo Sapien

<400> 374

Met	Leu	Ser	Glu	Ser	Ser	Ser	Phe	Leu	Lys	Gly	Val	Met	Leu	Gly
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Ser	Ile	Phe	Cys	Ala	Leu	Ile	Thr	Met	Leu	Gly	His	Ile	Arg	Ile
				20					25					30

Gly	His	Gly	Asn	Arg	Met	His	His	His	Glu	His	His	His	Leu	Gln
				35					40					45

Ala	Pro	Asn	Lys	Glu	Asp	Ile	Leu	Lys	Ile	Ser	Glu	Asp	Glu	Arg
				50					55					60

Met	Glu	Leu	Ser	Lys	Ser	Phe	Arg	Val	Tyr	Cys	Ile	Ile	Leu	Val
				65					70					75

Lys	Pro	Lys	Asp	Val	Ser	Leu	Trp	Ala	Ala	Val	Lys	Glu	Thr	Trp
				80					85					90

Thr	Lys	His	Cys	Asp	Lys	Ala	Glu	Phe	Phe	Ser	Ser	Glu	Asn	Val
				95					100					105

Lys	Val	Phe	Glu	Ser	Ile	Asn	Met	Asp	Thr	Asn	Asp	Met	Trp	Leu
				110					115					120

Met	Met	Arg	Lys	Ala	Tyr	Lys	Tyr	Ala	Phe	Asp	Lys	Tyr	Arg	Asp
				125					130					135

Gln	Tyr	Asn	Trp	Phe	Phe	Leu	Ala	Arg	Pro	Thr	Thr	Phe	Ala	Ile
				140					145					150

Ile	Glu	Asn	Leu	Lys	Tyr	Phe	Leu	Leu	Lys	Lys	Asp	Pro	Ser	Gln
				155					160					165

Pro	Phe	Tyr	Leu	Gly	His	Thr	Ile	Lys	Ser	Gly	Asp	Leu	Glu	Tyr
				170					175					180

Val	Gly	Met	Glu	Gly	Gly	Ile	Val	Leu	Ser	Val	Glu	Ser	Met	Lys
				185					190					195

Arg	Leu	Asn	Ser	Leu	Leu	Asn	Ile	Pro	Glu	Lys	Cys	Pro	Glu	Gln
				200					205					210

Gly	Gly	Met	Ile	Trp	Lys	Ile	Ser	Glu	Asp	Lys	Gln	Leu	Ala	Val
				215					220					225

Cys	Leu	Lys	Tyr	Ala	Gly	Val	Phe	Ala	Glu	Asn	Ala	Glu	Asp	Ala
				230					235					240

Asp	Gly	Lys	Asp	Val	Phe	Asn	Thr	Lys	Ser	Val	Gly	Leu	Ser	Ile
				245					250					255

Lys	Glu	Ala	Met	Thr	Tyr	His	Pro	Asn	Gln	Val	Val	Glu	Gly	Cys
				260					265					270
Cys	Ser	Asp	Met	Ala	Val	Thr	Phe	Asn	Gly	Leu	Thr	Pro	Asn	Gln
				275					280					285
Met	His	Val	Met	Met	Tyr	Gly	Val	Tyr	Arg	Leu	Arg	Ala	Phe	Gly
				290					295					300
His	Ile	Phe	Asn	Asp	Ala	Leu	Val	Phe	Leu	Pro	Pro	Asn	Gly	Ser
				305					310					315

Asp Asn Asp

<210> 375
 <211> 1679
 <212> DNA
 <213> Homo Sapien

<400> 375

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caaaaaagaa gaaaaagaag aagaaaaaaa atcatgaaaa ccatccagcc 150
aaaaatgcac aattctatct cttgggcaat cttcacgggg ctggctgctc 200
tgtgtctctt ccaaggagtg cccgtgcgca gcggagatgc caccttcccc 250
aaagctatgg acaacgtgac ggtccggcag ggggagagcg ccaccctcag 300
gtgcactatt gacaaccggg tcaccgggtt ggcttggtta aaccgcagca 350
ccatcctcta tgctgggaat gacaagtggg gcctggatcc tcgctgggtc 400
cttctgagca acacccaaac gcagtacagc atcgagatcc agaacgtgga 450
tgtgtatgac gagggccctt acacctgctc ggtgcagaca gacaaccacc 500
caaagacctc tagggccac ctcattgtgc aagtatctcc caaaattgta 550
gagatttctt cagatatctc cattaatgaa gggaacaata ttagcctcac 600
ctgcatagca actggtagac cagagcctac ggttacttgg agacacatct 650
ctcccaaagc ggttggtttt gtgagtgaag acgaatactt ggaaattcag 700
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cgtggccgcg cccgtggtac ggagagtaaa ggtcaccgtg aactatccac 800
catacatttc agaagccaag ggtacaggtg tccccgtggg aaaaagggg 850
aactgcagt gtgaagcctc agcagtcctc tcagcagaat tccagtggta 900
caaggatgac aaaagactga ttgaaggaaa gaaaggggtg aaagtggaaa 950

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acagaccttt cctctcaaaa ctcatcttct tcaatgtctc tgaacatgac 1000
 tatgggaact acacttgcgt ggcctccaac aagctgggcc acaccaatgc 1050
 cagcatcatg ctatttggtc caggcgccgt cagcgagggtg agcaacggca 1100
 cgtcgaggag ggcaggctgc gtctggctgc tgcctcttct ggtcttgac 1150
 ctgcttctca aattttgatg tgagtgccac ttccccaccc gggaaaggct 1200
 gccgccacca ccaccaccaa cacaacagca atggcaacac cgacagcaac 1250
 caatcagata tatacaaatg aaattagaag aaacacagcc tcatgggaca 1300
 gaaatttgag ggaggggaac aaagaatact ttggggggaa aagagtttta 1350
 aaaaagaaat tgaaaattgc cttgcagata tttaggtaca atggagtttt 1400
 cttttcccaa acgggaagaa cacagcacac ccggcttgga cccactgcaa 1450
 gctgcacgt gcaacctctt tgggtgccagt gtgggcaagg gctcagctc 1500
 tctgcccaca gagtgcccc acgtggaaca ttctggagct ggccatccca 1550
 aattcaatca gtccatagag acgaacagaa tgagaccttc cggcccaagc 1600
 gtggcgctgc gggcactttg gtagactgtg ccaccacggc gtgtgttggtg 1650
 aaacgtgaaa taaaaagagc aaaaaaaaaa 1679

<210> 376

<211> 344

<212> PRT

<213> Homo Sapien

<400> 376

Met	Lys	Thr	Ile	Gln	Pro	Lys	Met	His	Asn	Ser	Ile	Ser	Trp	Ala
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Ile	Phe	Thr	Gly	Leu	Ala	Ala	Leu	Cys	Leu	Phe	Gln	Gly	Val	Pro
				20					25					30
Val	Arg	Ser	Gly	Asp	Ala	Thr	Phe	Pro	Lys	Ala	Met	Asp	Asn	Val
				35					40					45
Thr	Val	Arg	Gln	Gly	Glu	Ser	Ala	Thr	Leu	Arg	Cys	Thr	Ile	Asp
				50					55					60
Asn	Arg	Val	Thr	Arg	Val	Ala	Trp	Leu	Asn	Arg	Ser	Thr	Ile	Leu
				65					70					75
Tyr	Ala	Gly	Asn	Asp	Lys	Trp	Cys	Leu	Asp	Pro	Arg	Val	Val	Leu
				80					85					90
Leu	Ser	Asn	Thr	Gln	Thr	Gln	Tyr	Ser	Ile	Glu	Ile	Gln	Asn	Val
				95					100					105
Asp	Val	Tyr	Asp	Glu	Gly	Pro	Tyr	Thr	Cys	Ser	Val	Gln	Thr	Asp

Asn	His	Pro	Lys	Thr	Ser	Arg	Val	His	Leu	Ile	Val	Gln	Val	Ser
				125					130					135
Pro	Lys	Ile	Val	Glu	Ile	Ser	Ser	Asp	Ile	Ser	Ile	Asn	Glu	Gly
				140					145					150
Asn	Asn	Ile	Ser	Leu	Thr	Cys	Ile	Ala	Thr	Gly	Arg	Pro	Glu	Pro
				155					160					165
Thr	Val	Thr	Trp	Arg	His	Ile	Ser	Pro	Lys	Ala	Val	Gly	Phe	Val
				170					175					180
Ser	Glu	Asp	Glu	Tyr	Leu	Glu	Ile	Gln	Gly	Ile	Thr	Arg	Glu	Gln
				185					190					195
Ser	Gly	Asp	Tyr	Glu	Cys	Ser	Ala	Ser	Asn	Asp	Val	Ala	Ala	Pro
				200					205					210
Val	Val	Arg	Arg	Val	Lys	Val	Thr	Val	Asn	Tyr	Pro	Pro	Tyr	Ile
				215					220					225
Ser	Glu	Ala	Lys	Gly	Thr	Gly	Val	Pro	Val	Gly	Gln	Lys	Gly	Thr
				230					235					240
Leu	Gln	Cys	Glu	Ala	Ser	Ala	Val	Pro	Ser	Ala	Glu	Phe	Gln	Trp
				245					250					255
Tyr	Lys	Asp	Asp	Lys	Arg	Leu	Ile	Glu	Gly	Lys	Lys	Gly	Val	Lys
				260					265					270
Val	Glu	Asn	Arg	Pro	Phe	Leu	Ser	Lys	Leu	Ile	Phe	Phe	Asn	Val
				275					280					285
Ser	Glu	His	Asp	Tyr	Gly	Asn	Tyr	Thr	Cys	Val	Ala	Ser	Asn	Lys
				290					295					300
Leu	Gly	His	Thr	Asn	Ala	Ser	Ile	Met	Leu	Phe	Gly	Pro	Gly	Ala
				305					310					315
Val	Ser	Glu	Val	Ser	Asn	Gly	Thr	Ser	Arg	Arg	Ala	Gly	Cys	Val
				320					325					330
Trp	Leu	Leu	Pro	Leu	Leu	Val	Leu	His	Leu	Leu	Leu	Lys	Phe	
				335					340					

<210> 377

<211> 2110

<212> DNA

<213> Homo Sapien

<400> 377

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caacaggtgc ttgctcgggg ctgaaggtga cagtgccatc acacactgtc 150

acacaatgtc ttgtgcaaca gaaaaacatg ttgggggaaat attcctcagt 1650
 ggagagtcgt tctcatgctg acgggggagaa cgaaagtgac agggggtttcc 1700
 tcataagttt tgtatgaaat atctctacaa acctcaatta gttctactct 1750
 acactttcac tatcatcaac actgagacta tcctgtctca cctacaaatg 1800
 tggaaacttt acattgttcg atttttcagc agactttggt ttattaaatt 1850
 tttattagtg ttaagaatgc taaatttatg tttcaatttt atttccaaat 1900
 ttctatcttg ttattgttac aacaaagtaa taaggatggg tgtcacaaaa 1950
 acaaaactat gccttctctt ttttttcaat caccagtagt atttttgaga 2000
 agacttgtga acacttaagg aaatgactat taaagtctta tttttatttt 2050
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 aaaaaaaaaa 2110

<210> 378
 <211> 450
 <212> PRT
 <213> Homo Sapien

<400> 378

Met	Trp	Leu	Lys	Val	Phe	Thr	Thr	Phe	Leu	Ser	Phe	Ala	Thr	Gly
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Ala	Cys	Ser	Gly	Leu	Lys	Val	Thr	Val	Pro	Ser	His	Thr	Val	His
				20					25					30
Gly	Val	Arg	Gly	Gln	Ala	Leu	Tyr	Leu	Pro	Val	His	Tyr	Gly	Phe
				35					40					45
His	Thr	Pro	Ala	Ser	Asp	Ile	Gln	Ile	Ile	Trp	Leu	Phe	Glu	Arg
				50					55					60
Pro	His	Thr	Met	Pro	Lys	Tyr	Leu	Leu	Gly	Ser	Val	Asn	Lys	Ser
				65					70					75
Val	Val	Pro	Asp	Leu	Glu	Tyr	Gln	His	Lys	Phe	Thr	Met	Met	Pro
				80					85					90
Pro	Asn	Ala	Ser	Leu	Leu	Ile	Asn	Pro	Leu	Gln	Phe	Pro	Asp	Glu
				95					100					105
Gly	Asn	Tyr	Ile	Val	Lys	Val	Asn	Ile	Gln	Gly	Asn	Gly	Thr	Leu
				110					115					120
Ser	Ala	Ser	Gln	Lys	Ile	Gln	Val	Thr	Val	Asp	Asp	Pro	Val	Thr
				125					130					135
Lys	Pro	Val	Val	Gln	Ile	His	Pro	Pro	Ser	Gly	Ala	Val	Glu	Tyr
				140					145					150

Val	Gly	Asn	Met	Thr	Leu	Thr	Cys	His	Val	Glu	Gly	Gly	Thr	Arg	
				155					160					165	
Leu	Ala	Tyr	Gln	Trp	Leu	Lys	Asn	Gly	Arg	Pro	Val	His	Thr	Ser	
				170					175					180	
Ser	Thr	Tyr	Ser	Phe	Ser	Pro	Gln	Asn	Asn	Thr	Leu	His	Ile	Ala	
				185					190					195	
Pro	Val	Thr	Lys	Glu	Asp	Ile	Gly	Asn	Tyr	Ser	Cys	Leu	Val	Arg	
				200					205					210	
Asn	Pro	Val	Ser	Glu	Met	Glu	Ser	Asp	Ile	Ile	Met	Pro	Ile	Ile	
				215					220					225	
Tyr	Tyr	Gly	Pro	Tyr	Gly	Leu	Gln	Val	Asn	Ser	Asp	Lys	Gly	Leu	
				230					235					240	
Lys	Val	Gly	Glu	Val	Phe	Thr	Val	Asp	Leu	Gly	Glu	Ala	Ile	Leu	
				245					250					255	
Phe	Asp	Cys	Ser	Ala	Asp	Ser	His	Pro	Pro	Asn	Thr	Tyr	Ser	Trp	
				260					265					270	
Ile	Arg	Arg	Thr	Asp	Asn	Thr	Thr	Tyr	Ile	Ile	Lys	His	Gly	Pro	
				275					280					285	
Arg	Leu	Glu	Val	Ala	Ser	Glu	Lys	Val	Ala	Gln	Lys	Thr	Met	Asp	
				290					295					300	
Tyr	Val	Cys	Cys	Ala	Tyr	Asn	Asn	Ile	Thr	Gly	Arg	Gln	Asp	Glu	
				305					310					315	
Thr	His	Phe	Thr	Val	Ile	Ile	Thr	Ser	Val	Gly	Leu	Glu	Lys	Leu	
				320					325					330	
Ala	Gln	Lys	Gly	Lys	Ser	Leu	Ser	Pro	Leu	Ala	Ser	Ile	Thr	Gly	
				335					340					345	
Ile	Ser	Leu	Phe	Leu	Ile	Ile	Ser	Met	Cys	Leu	Leu	Phe	Leu	Trp	
				350					355					360	
Lys	Lys	Tyr	Gln	Pro	Tyr	Lys	Val	Ile	Lys	Gln	Lys	Leu	Glu	Gly	
				365					370					375	
Arg	Pro	Glu	Thr	Glu	Tyr	Arg	Lys	Ala	Gln	Thr	Phe	Ser	Gly	His	
				380					385					390	
Glu	Asp	Ala	Leu	Asp	Asp	Phe	Gly	Ile	Tyr	Glu	Phe	Val	Ala	Phe	
				395					400					405	
Pro	Asp	Val	Ser	Gly	Val	Ser	Arg	Ile	Pro	Ser	Arg	Ser	Val	Pro	
				410					415					420	
Ala	Ser	Asp	Cys	Val	Ser	Gly	Gln	Asp	Leu	His	Ser	Thr	Val	Tyr	
				425					430					435	
Glu	Val	Ile	Gln	His	Ile	Pro	Ala	Gln	Gln	Gln	Asp	His	Pro	Glu	

<210> 379
 <211> 823
 <212> DNA
 <213> Homo Sapien

<400> 379
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<210> 380
 <211> 155
 <212> PRT
 <213> Homo Sapien

<400> 380
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 20 25 30
 Gly Leu Pro Gly Arg Lys Ser Ser Ser Arg Val Gly Glu Lys Leu
 35 40 45
 Gln Ser Ala His Lys Met Pro Leu Ser Pro Gly Leu Leu Leu

	50		55		60									
Leu	Leu	Ser	Gly	Ala	Thr	Ala	Thr	Ala	Ala	Leu	Pro	Leu	Glu	Gly
			65						70					75
Gly	Pro	Thr	Gly	Arg	Asp	Ser	Glu	His	Met	Gln	Glu	Ala	Ala	Gly
			80						85					90
Ile	Arg	Lys	Ser	Ser	Leu	Leu	Thr	Phe	Leu	Ala	Trp	Trp	Phe	Glu
			95						100					105
Trp	Thr	Ser	Gln	Ala	Ser	Ala	Gly	Pro	Leu	Ile	Gly	Glu	Glu	Ala
			110						115					120
Arg	Glu	Val	Ala	Arg	Arg	Gln	Glu	Gly	Ala	Pro	Pro	Gln	Gln	Ser
			125						130					135
Ala	Arg	Arg	Asp	Arg	Met	Pro	Cys	Arg	Asn	Phe	Phe	Trp	Lys	Thr
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Phe	Ser	Ser	Cys	Lys										
			155											

<210> 381
 <211> 2236
 <212> DNA
 <213> Homo Sapien

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 cgccgcgagg ccccgccccg gcccgcccccc gcccgccccg ggccggcggg 200
 ggaaccgggc ggattcctcg cgcgtcaaac cacctgatcc cataaaacat 250
 tcatactccc ggcgccccgc gctgcgagcg ccccgccagt ccgcgccgcc 300
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 cccagccaga gccgggaggga gcggagcgcg ccgagcctcg tcccgcggcc 400
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 cccaaccctt acgatgaaga gggcgccgcg tggaggaggc cggctgctgg 550
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 ttacagggtt cggcggcagc gtttgttcca gaacgccgcc tcccacccag 2150
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gacgacgtgg aataaagagc tcttttctta aaaaaa 2236

<210> 382

<211> 473

<212> PRT

<213> Homo Sapien

<400> 382

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			20						25					30	
Cys	Val	Cys	Tyr	Asn	Glu	Pro	Lys	Val	Thr	Thr	Ser	Cys	Pro	Gln	
			35						40					45	
Gln	Gly	Leu	Gln	Ala	Val	Pro	Val	Gly	Ile	Pro	Ala	Ala	Ser	Gln	
			50						55					60	
Arg	Ile	Phe	Leu	His	Gly	Asn	Arg	Ile	Ser	His	Val	Pro	Ala	Ala	
			65						70					75	
Ser	Phe	Arg	Ala	Cys	Arg	Asn	Leu	Thr	Ile	Leu	Trp	Leu	His	Ser	
			80						85					90	
Asn	Val	Leu	Ala	Arg	Ile	Asp	Ala	Ala	Ala	Phe	Thr	Gly	Leu	Ala	
			95						100					105	
Leu	Leu	Glu	Gln	Leu	Asp	Leu	Ser	Asp	Asn	Ala	Gln	Leu	Arg	Ser	
			110						115					120	
Val	Asp	Pro	Ala	Thr	Phe	His	Gly	Leu	Gly	Arg	Leu	His	Thr	Leu	
			125						130					135	
His	Leu	Asp	Arg	Cys	Gly	Leu	Gln	Glu	Leu	Gly	Pro	Gly	Leu	Phe	
			140						145					150	
Arg	Gly	Leu	Ala	Ala	Leu	Gln	Tyr	Leu	Tyr	Leu	Gln	Asp	Asn	Ala	
			155						160					165	
Leu	Gln	Ala	Leu	Pro	Asp	Asp	Thr	Phe	Arg	Asp	Leu	Gly	Asn	Leu	
			170						175					180	
Thr	His	Leu	Phe	Leu	His	Gly	Asn	Arg	Ile	Ser	Ser	Val	Pro	Glu	
			185						190					195	
Arg	Ala	Phe	Arg	Gly	Leu	His	Ser	Leu	Asp	Arg	Leu	Leu	Leu	His	
			200						205					210	
Gln	Asn	Arg	Val	Ala	His	Val	His	Pro	His	Ala	Phe	Arg	Asp	Leu	
			215						220					225	
Gly	Arg	Leu	Met	Thr	Leu	Tyr	Leu	Phe	Ala	Asn	Asn	Leu	Ser	Ala	
			230						235					240	
Leu	Pro	Thr	Glu	Ala	Leu	Ala	Pro	Leu	Arg	Ala	Leu	Gln	Tyr	Leu	
			245						250					255	

Arg	Leu	Asn	Asp	Asn	Pro	Trp	Val	Cys	Asp	Cys	Arg	Ala	Arg	Pro	
				260					265					270	
Leu	Trp	Ala	Trp	Leu	Gln	Lys	Phe	Arg	Gly	Ser	Ser	Ser	Glu	Val	
				275					280					285	
Pro	Cys	Ser	Leu	Pro	Gln	Arg	Leu	Ala	Gly	Arg	Asp	Leu	Lys	Arg	
				290					295					300	
Leu	Ala	Ala	Asn	Asp	Leu	Gln	Gly	Cys	Ala	Val	Ala	Thr	Gly	Pro	
				305					310					315	
Tyr	His	Pro	Ile	Trp	Thr	Gly	Arg	Ala	Thr	Asp	Glu	Glu	Pro	Leu	
				320					325					330	
Gly	Leu	Pro	Lys	Cys	Cys	Gln	Pro	Asp	Ala	Ala	Asp	Lys	Ala	Ser	
				335					340					345	
Val	Leu	Glu	Pro	Gly	Arg	Pro	Ala	Ser	Ala	Gly	Asn	Ala	Leu	Lys	
				350					355					360	
Gly	Arg	Val	Pro	Pro	Gly	Asp	Ser	Pro	Pro	Gly	Asn	Gly	Ser	Gly	
				365					370					375	
Pro	Arg	His	Ile	Asn	Asp	Ser	Pro	Phe	Gly	Thr	Leu	Pro	Gly	Ser	
				380					385					390	
Ala	Glu	Pro	Pro	Leu	Thr	Ala	Val	Arg	Pro	Glu	Gly	Ser	Glu	Pro	
				395					400					405	
Pro	Gly	Phe	Pro	Thr	Ser	Gly	Pro	Arg	Arg	Arg	Pro	Gly	Cys	Ser	
				410					415					420	
Arg	Lys	Asn	Arg	Thr	Arg	Ser	His	Cys	Arg	Leu	Gly	Gln	Ala	Gly	
				425					430					435	
Ser	Gly	Gly	Gly	Gly	Thr	Gly	Asp	Ser	Glu	Gly	Ser	Gly	Ala	Leu	
				440					445					450	
Pro	Ser	Leu	Thr	Cys	Ser	Leu	Thr	Pro	Leu	Gly	Leu	Ala	Leu	Val	
				455					460					465	
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				470											

<210> 383
 <211> 2336
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 1620, 1673
 <223> unknown base

<400> 383
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 tacgttctta aatctatgaa gtcgagggac ctttcgctgc ttttgtaggg 150
 acttctttcc ttgcttcagc aacatgaggc ttttcttggtg gaacgcggtc 200
 ttgactctgt tcgtcacttc tttgattggg gctttgatcc ctgaaccaga 250
 agtgaaaatt gaagttctcc agaagccatt catctgccat cgcaagacca 300
 aaggagggga tttgatgttg gtccactatg aaggctactt agaaaaggac 350
 ggctccttat ttcactccac tcacaaacat aacaatggtc agcccatttg 400
 gtttaccctg ggcatcctgg aggctctcaa aggttgggac cagggcttga 450
 aaggaatgtg tgtaggagag aagagaaagc tcatcattcc tcctgctctg 500
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 atttaatat gatctcctgg agattcgaaa tggaccaaga tcccatgaat 600
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 gttaaagcat atttaaagaa ggagtttgaa aaacatgggtg cggtggtgaa 700
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 aagacaaaga tgggtttata tctgccagag aatttacata taaacacgat 800
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 gagggcagtc atctttaaag aacattttat ttttatacaa tgttctttct 900
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 cccttaggtt tctaagtacc catttctttc tgataagtta ttgggaagaa 1000
 aaagctaatt ggtctttgaa tagaagactt ctggacaatt tttcactttc 1050
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<210> 384

<211> 211

<212> PRT

<213> Homo Sapien

<400> 384

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Ser	Leu	Ile	Gly	Ala	Leu	Ile	Pro	Glu	Pro	Glu	Val	Lys	Ile	Glu
			20					25						30
Val	Leu	Gln	Lys	Pro	Phe	Ile	Cys	His	Arg	Lys	Thr	Lys	Gly	Gly
			35					40						45
Asp	Leu	Met	Leu	Val	His	Tyr	Glu	Gly	Tyr	Leu	Glu	Lys	Asp	Gly
			50					55						60
Ser	Leu	Phe	His	Ser	Thr	His	Lys	His	Asn	Asn	Gly	Gln	Pro	Ile
			65					70						75
Trp	Phe	Thr	Leu	Gly	Ile	Leu	Glu	Ala	Leu	Lys	Gly	Trp	Asp	Gln
			80					85						90

Gly	Leu	Lys	Gly	Met	Cys	Val	Gly	Glu	Lys	Arg	Lys	Leu	Ile	Ile
				95					100					105
Pro	Pro	Ala	Leu	Gly	Tyr	Gly	Lys	Glu	Gly	Lys	Gly	Lys	Ile	Pro
				110					115					120
Pro	Glu	Ser	Thr	Leu	Ile	Phe	Asn	Ile	Asp	Leu	Leu	Glu	Ile	Arg
				125					130					135
Asn	Gly	Pro	Arg	Ser	His	Glu	Ser	Phe	Gln	Glu	Met	Asp	Leu	Asn
				140					145					150
Asp	Asp	Trp	Lys	Leu	Ser	Lys	Asp	Glu	Val	Lys	Ala	Tyr	Leu	Lys
				155					160					165
Lys	Glu	Phe	Glu	Lys	His	Gly	Ala	Val	Val	Asn	Glu	Ser	His	His
				170					175					180
Asp	Ala	Leu	Val	Glu	Asp	Ile	Phe	Asp	Lys	Glu	Asp	Glu	Asp	Lys
				185					190					195
Asp	Gly	Phe	Ile	Ser	Ala	Arg	Glu	Phe	Thr	Tyr	Lys	His	Asp	Glu
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Leu

<210> 385
 <211> 2749
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 1869, 1887
 <223> unknown base

<400> 385
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 tctttttaca gagcaattat cttgtatata caactttgta tcctgccttt 2650
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 gaccttttta taaataaaat gttcatcagc tgcataaaaa aaaaaaaaaa 2749

<210> 386

<211> 332

<212> PRT

<213> Homo Sapien

<400> 386

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Tyr	Glu	Ala	Leu	Glu	Gly	Pro	Glu	Glu	Ile	Ser	Gly	Phe	Glu	Gly
				20				25					30	
Asp	Thr	Val	Ser	Leu	Gln	Cys	Thr	Tyr	Arg	Glu	Glu	Leu	Arg	Asp
				35				40					45	
His	Arg	Lys	Tyr	Trp	Cys	Arg	Lys	Gly	Gly	Ile	Leu	Phe	Ser	Arg
				50				55					60	
Cys	Ser	Gly	Thr	Ile	Tyr	Ala	Glu	Glu	Glu	Gly	Gln	Glu	Thr	Met
				65				70					75	
Lys	Gly	Arg	Val	Ser	Ile	Arg	Asp	Ser	Arg	Gln	Glu	Leu	Ser	Leu
				80				85					90	
Ile	Val	Thr	Leu	Trp	Asn	Leu	Thr	Leu	Gln	Asp	Ala	Gly	Glu	Tyr
				95				100					105	

Trp	Cys	Gly	Val	Glu	Lys	Arg	Gly	Pro	Asp	Glu	Ser	Leu	Leu	Ile	110	115	120
Ser	Leu	Phe	Val	Phe	Pro	Gly	Pro	Cys	Cys	Pro	Pro	Ser	Pro	Ser	125	130	135
Pro	Thr	Phe	Gln	Pro	Leu	Ala	Thr	Thr	Arg	Leu	Gln	Pro	Lys	Ala	140	145	150
Lys	Ala	Gln	Gln	Thr	Gln	Pro	Pro	Gly	Leu	Thr	Ser	Pro	Gly	Leu	155	160	165
Tyr	Pro	Ala	Ala	Thr	Thr	Ala	Lys	Gln	Gly	Lys	Thr	Gly	Ala	Glu	170	175	180
Ala	Pro	Pro	Leu	Pro	Gly	Thr	Ser	Gln	Tyr	Gly	His	Glu	Arg	Thr	185	190	195
Ser	Gln	Tyr	Thr	Gly	Thr	Ser	Pro	His	Pro	Ala	Thr	Ser	Pro	Pro	200	205	210
Ala	Gly	Ser	Ser	Arg	Pro	Pro	Met	Gln	Leu	Asp	Ser	Thr	Ser	Ala	215	220	225
Glu	Asp	Thr	Ser	Pro	Ala	Leu	Ser	Ser	Gly	Ser	Ser	Lys	Pro	Arg	230	235	240
Val	Ser	Ile	Pro	Met	Val	Arg	Ile	Leu	Ala	Pro	Val	Leu	Val	Leu	245	250	255
Leu	Ser	Leu	Leu	Ser	Ala	Ala	Gly	Leu	Ile	Ala	Phe	Cys	Ser	His	260	265	270
Leu	Leu	Leu	Trp	Arg	Lys	Glu	Ala	Gln	Gln	Ala	Thr	Glu	Thr	Gln	275	280	285
Arg	Asn	Glu	Lys	Phe	Trp	Leu	Ser	Arg	Leu	Thr	Ala	Glu	Glu	Lys	290	295	300
Glu	Ala	Pro	Ser	Gln	Ala	Pro	Glu	Gly	Asp	Val	Ile	Ser	Met	Pro	305	310	315
Pro	Leu	His	Thr	Ser	Glu	Glu	Glu	Leu	Gly	Phe	Ser	Lys	Phe	Val	320	325	330

Ser Ala

<210> 387

<211> 2458

<212> DNA

<213> Homo Sapien

<400> 387

gcgccgggag cccatctgcc cccaggggca cggggcgcg ggccggctcc 50

cgcccggcac atggctgcag ccacctgcgc cgcaccccgga ggcgccgcgc 100


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aaagcaggag tccaaatcta tttgttgacc aggacctgtg gtgagaaggt 1600
tggggaaagg tgaggtgaat atacctaaaa cttttaatgt gggatatattt 1650
gtatcagtgc tttgattcac aattttcaag aggaaatggg atgctgtttg 1700
taaattttct atgcatttct gcaaacttat tggattatta gttattcaga 1750
cagtcaagca gaaccacag ccttattaca cctgtctaca ccatgtactg 1800
agctaaccac ttctaagaaa ctccaaaaaa ggaaacatgt gtcttctatt 1850
ctgacttaac ttcatttgtc ataaggtttg gatattaatt tcaaggggag 1900
ttgaaatagt gggagatgga gaagagtga tgagtttctc ccactctata 1950
ctaattctac tatttgtatt gagcccaaaa taactatgaa aggagacaaa 2000
aatttgtgac aaaggattgt gaagagcttt ccactttcat gatgttatga 2050
ggattgttga caaacattag aaatatataa tggagcaatt gtggatttcc 2100
cctcaaatac gatgcctcta aggactttcc tgctagatat ttctggaagg 2150
agaaaataca acatgtcatt tatcaacgtc cttagaaaga attcttctag 2200
agaaaaaggg atctaggaat gctgaaagat tacccaacat accattatag 2250
tctcttcttt ctgagaaaat gtgaaaccag aattgcaaga ctgggtggac 2300
tagaaagggg gattagatca gttttctctt aatatgtcaa ggaaggtagc 2350
cgggcatggt gccaggcacc tgtaggaaaa tccagcaggt ggaggttgca 2400
gtgagccgag attatgccat tgcactccag cctgggtgac agagcgggac 2450
tccgtctc 2458

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<210> 388
<211> 373
<212> PRT
<213> Homo Sapien

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<400> 388
Met Ser Leu Leu Leu Leu Leu Leu Val Ser Tyr Tyr Val Gly
  1             5             10             15

Thr Leu Gly Thr His Thr Glu Ile Lys Arg Val Ala Glu Glu Lys
          20             25             30

Val Thr Leu Pro Cys His His Gln Leu Gly Leu Pro Glu Lys Asp
          35             40             45

Thr Leu Asp Ile Glu Trp Leu Leu Thr Asp Asn Glu Gly Asn Gln
          50             55             60

Lys Val Val Ile Thr Tyr Ser Ser Arg His Val Tyr Asn Asn Leu
          65             70             75

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Thr	Glu	Glu	Gln	Lys	Gly	Arg	Val	Ala	Phe	Ala	Ser	Asn	Phe	Leu	
				80					85					90	
Ala	Gly	Asp	Ala	Ser	Leu	Gln	Ile	Glu	Pro	Leu	Lys	Pro	Ser	Asp	
				95					100					105	
Glu	Gly	Arg	Tyr	Thr	Cys	Lys	Val	Lys	Asn	Ser	Gly	Arg	Tyr	Val	
				110					115					120	
Trp	Ser	His	Val	Ile	Leu	Lys	Val	Leu	Val	Arg	Pro	Ser	Lys	Pro	
				125					130					135	
Lys	Cys	Glu	Leu	Glu	Gly	Glu	Leu	Thr	Glu	Gly	Ser	Asp	Leu	Thr	
				140					145					150	
Leu	Gln	Cys	Glu	Ser	Ser	Ser	Gly	Thr	Glu	Pro	Ile	Val	Tyr	Tyr	
				155					160					165	
Trp	Gln	Arg	Ile	Arg	Glu	Lys	Glu	Gly	Glu	Asp	Glu	Arg	Leu	Pro	
				170					175					180	
Pro	Lys	Ser	Arg	Ile	Asp	Tyr	Asn	His	Pro	Gly	Arg	Val	Leu	Leu	
				185					190					195	
Gln	Asn	Leu	Thr	Met	Ser	Tyr	Ser	Gly	Leu	Tyr	Gln	Cys	Thr	Ala	
				200					205					210	
Gly	Asn	Glu	Ala	Gly	Lys	Glu	Ser	Cys	Val	Val	Arg	Val	Thr	Val	
				215					220					225	
Gln	Tyr	Val	Gln	Ser	Ile	Gly	Met	Val	Ala	Gly	Ala	Val	Thr	Gly	
				230					235					240	
Ile	Val	Ala	Gly	Ala	Leu	Leu	Ile	Phe	Leu	Leu	Val	Trp	Leu	Leu	
				245					250					255	
Ile	Arg	Arg	Lys	Asp	Lys	Glu	Arg	Tyr	Glu	Glu	Glu	Glu	Arg	Pro	
				260					265					270	
Asn	Glu	Ile	Arg	Glu	Asp	Ala	Glu	Ala	Pro	Lys	Ala	Arg	Leu	Val	
				275					280					285	
Lys	Pro	Ser	Ser	Ser	Ser	Ser	Gly	Ser	Arg	Ser	Ser	Arg	Ser	Gly	
				290					295					300	
Ser	Ser	Ser	Thr	Arg	Ser	Thr	Ala	Asn	Ser	Ala	Ser	Arg	Ser	Gln	
				305					310					315	
Arg	Thr	Leu	Ser	Thr	Asp	Ala	Ala	Pro	Gln	Pro	Gly	Leu	Ala	Thr	
				320					325					330	
Gln	Ala	Tyr	Ser	Leu	Val	Gly	Pro	Glu	Val	Arg	Gly	Ser	Glu	Pro	
				335					340					345	
Lys	Lys	Val	His	His	Ala	Asn	Leu	Thr	Lys	Ala	Glu	Thr	Thr	Pro	
				350					355					360	
Ser	Met	Ile	Pro	Ser	Gln	Ser	Arg	Ala	Phe	Gln	Thr	Val			

<210> 389
 <211> 963
 <212> DNA
 <213> Homo Sapien

<400> 389
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 agagctcatt ccagatgcac ccctgtccag tgctgcctat agcatccgca 150
 gcatcgggga gaggcctgtc ctcaaagctc cagtcccca aaggcaaaaa 200
 tgtgaccact ggactccctg cccatctgac acctatgcct acaggttact 250
 cagcggaggt ggcagaagca agtacgcca aatctgcttt gaggataacc 300
 tacttatggg agaacagctg ggaaatggtt ccagaggaat aaacattgcc 350
 attgtcaact atgtaactgg gaatgtgaca gcaacacgat gttttgatat 400
 gtatgaaggc gataactctg gaccgatgac aaagtttatt cagagtgtctg 450
 ctccaaaatc cctgctcttc atgggtgacct atgacgacgg aagcacaaga 500
 ctgaataacg atgccaagaa tgccatagaa gcacttggaa gtaaagaaat 550
 caggaacatg aaattcaggt ctagctgggt atttattgca gcaaaaggct 600
 tggaactccc ttccgaaatt cagagagaaa agatcaacca ctctgatgct 650
 aagaacaaca gatattctgg ctggcctgca gagatccaga tagaaggctg 700
 catacccaaa gaacgaagct gacactgcag ggtcctgagt aaatgtgttc 750
 tgtataaaca aatgcagctg gaatcgctca agaattctat ttttctaaat 800
 ccaacagccc atatttgatg agtatcttgg gtttggttga aaccaatgaa 850
 catttgctag ttgtatcaaa tcttggtacg cagtattttt ataccagtat 900
 tttatgtagt gaagatgtca attagcagga aactaaaatg aatggaaatt 950
 cttaaaaaaa aaa 963

<210> 390
 <211> 235
 <212> PRT
 <213> Homo Sapien

<400> 390
 Met Arg Pro Leu Ala Gly Gly Leu Leu Lys Val Val Phe Val Val
 1 5 10 15
 Phe Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu

	20	25	30
Leu Ile Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg	35	40	45
Ser Ile Gly Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg	50	55	60
Gln Lys Cys Asp His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala	65	70	75
Tyr Arg Leu Leu Ser Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile	80	85	90
Cys Phe Glu Asp Asn Leu Leu Met Gly Glu Gln Leu Gly Asn Val	95	100	105
Ala Arg Gly Ile Asn Ile Ala Ile Val Asn Tyr Val Thr Gly Asn	110	115	120
Val Thr Ala Thr Arg Cys Phe Asp Met Tyr Glu Gly Asp Asn Ser	125	130	135
Gly Pro Met Thr Lys Phe Ile Gln Ser Ala Ala Pro Lys Ser Leu	140	145	150
Leu Phe Met Val Thr Tyr Asp Asp Gly Ser Thr Arg Leu Asn Asn	155	160	165
Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser Lys Glu Ile Arg	170	175	180
Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala Ala Lys Gly	185	190	195
Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn His Ser	200	205	210
Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile Gln	215	220	225
Ile Glu Gly Cys Ile Pro Lys Glu Arg Ser	230	235	

<210> 391
 <211> 3772
 <212> DNA
 <213> Homo Sapien

<400> 391
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 cccccctgcg cccgccccgc gcctctgcgc gccctgtcc gccccggccc 150
 agcccagccc agccccgcgg gccggtcaca cgcgagcca gccggccgcc 200

gggacgctgg acccacgatg gaattgacat caacaacaac tttcctgatt 1700
 taaacacgct gctctgggag gcagaggatc gacagaatgt ccccaggaaa 1750
 gttcccaatc actatatatgc aatccctgag tggtttctgt cggaaaatgc 1800
 cacggtggct gccgagacca gagcagtcac agcctggatg gaaaaaatcc 1850
 cttttgtgct gggcggcaac ctgcagggcg gcgagctggt ggtggcgtat 1900
 ccctacgacc tgggtgcggtc cccctggaag acgcaggaac acacccccac 1950
 ccccgatgac cacgtgttcc gctggctggc ctactcctat gcctccacac 2000
 accgcctcat gacagacgcc cggaggaggg tgtgccacac ggaggacttc 2050
 cagaaggagg agggcactgt caatggggcc tcctggcaca ccgtcgtctg 2100
 aagtctgaac gatttcagct accttcatac aaactgcttc gaactgtcca 2150
 tctacgtggg ctgtgataaa taccacatg agagccagct gcccgaggag 2200
 tgggagaata accgggaatc tctgatcgtg ttcattggagc aggttcatcg 2250
 tggcattaaa ggcttgggtga gagattcaca tggaaaagga atcccaaacg 2300
 ccattatctc cgtagaaggc attaacatg acatccgaac agccaacgat 2350
 ggggattact ggcgcctcct gaaccctgga gagtatgtgg tcacagcaaa 2400
 ggccgaaggt ttcactgcat ccaccaagaa ctgtatggtt ggctatgaca 2450
 tggggggccac aaggtgtgac ttcacactta gcaaaaccaa catggccagg 2500
 atccgagaga tcatggagaa gtttgggaag cagcccgtca gcctgccagc 2550
 caggcggctg aagctgcggg ggcggaagag acgacagcgt gggtgaccct 2600
 cctgggcccct tgagactcgt ctgggaccca tgcaaattaa accaacctgg 2650
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 aagtgcctgg aagagagggt gcattgtgag gcaggtccca aaagggaagg 2750
 ctggaggctg aggctgtttt cttttccttg ttcccattta tccaaataac 2800
 ttggacagag cagcagagaa aagctgatgg gagtgagaga actcagcaag 2850
 ccaacctggg aatcagagag agaaggagaa ggaggggagc ctgtccgttc 2900
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 ggcagcaagg gttccacgtg catttgcaat ttgcacagct aaaattgcag 3000
 catttcccca gctgggctgt cccaaatgtt accatttgag atgctcccag 3050
 gcgtcctaag agaatccacc ctctctggcc ctgggacatt gcaagctgct 3100

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tcagtgagcc tcttgaatct gtttagtctc ctttttcaac aaaggagtgt 3200
gttcagaaaa ggagagagag gctgagatca ttcaggagtt tgttgggcag 3250
caagcatgga gcttcttgca caaattctgg gtccataaac aacccccaaa 3300
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tctctgcttg aggtattgcc cctgtgtgga attgagtgt catgggttgg 3500
cctcatatca gcctgggagt tatttttgat atgtagaatg ccagatcttc 3550
cagattaggc taaatgtaat gaaaacctct taggattatc tgtggagcat 3600
cagtttggga agaattattg aattatcttg caagaaaaaa gtatgtctca 3650
ctttttgtta atgttgctgc ctcatgacc tgggaaaaat gaaaaaaaaa 3700
aataaagcaa atggtaagac ccttaaaaaa aaaaaaaaaa aaaaaaaaaa 3750
aaaaaaaaaa aaaaaaaaaa aa 3772

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<210> 392
<211> 756
<212> PRT
<213> Homo Sapien

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<400> 392
Met Ser Arg Pro Gly Thr Ala Thr Pro Ala Leu Ala Leu Val Leu
  1          5          10          15
Leu Ala Val Thr Leu Ala Gly Val Gly Ala Gln Gly Ala Ala Leu
          20          25          30
Glu Asp Pro Asp Tyr Tyr Gly Gln Glu Ile Trp Ser Arg Glu Pro
          35          40          45
Tyr Tyr Ala Arg Pro Glu Pro Glu Leu Glu Thr Phe Ser Pro Pro
          50          55          60
Leu Pro Ala Gly Pro Gly Glu Glu Trp Glu Arg Arg Pro Gln Glu
          65          70          75
Pro Arg Pro Pro Lys Arg Ala Thr Lys Pro Lys Lys Ala Pro Lys
          80          85          90
Arg Glu Lys Ser Ala Pro Glu Pro Pro Pro Pro Gly Lys His Ser
          95          100         105
Asn Lys Lys Val Met Arg Thr Lys Ser Ser Glu Lys Ala Ala Asn
          110         115         120

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Asp	Asp	His	Ser	Val	Arg	Val	Ala	Arg	Glu	Asp	Val	Arg	Glu	Ser	125	130	135
Cys	Pro	Pro	Leu	Gly	Leu	Glu	Thr	Leu	Lys	Ile	Thr	Asp	Phe	Gln	140	145	150
Leu	His	Ala	Ser	Thr	Val	Lys	Arg	Tyr	Gly	Leu	Gly	Ala	His	Arg	155	160	165
Gly	Arg	Leu	Asn	Ile	Gln	Ala	Gly	Ile	Asn	Glu	Asn	Asp	Phe	Tyr	170	175	180
Asp	Gly	Ala	Trp	Cys	Ala	Gly	Arg	Asn	Asp	Leu	Gln	Gln	Trp	Ile	185	190	195
Glu	Val	Asp	Ala	Arg	Arg	Leu	Thr	Arg	Phe	Thr	Gly	Val	Ile	Thr	200	205	210
Gln	Gly	Arg	Asn	Ser	Leu	Trp	Leu	Ser	Asp	Trp	Val	Thr	Ser	Tyr	215	220	225
Lys	Val	Met	Val	Ser	Asn	Asp	Ser	His	Thr	Trp	Val	Thr	Val	Lys	230	235	240
Asn	Gly	Ser	Gly	Asp	Met	Ile	Phe	Glu	Gly	Asn	Ser	Glu	Lys	Glu	245	250	255
Ile	Pro	Val	Leu	Asn	Glu	Leu	Pro	Val	Pro	Met	Val	Ala	Arg	Tyr	260	265	270
Ile	Arg	Ile	Asn	Pro	Gln	Ser	Trp	Phe	Asp	Asn	Gly	Ser	Ile	Cys	275	280	285
Met	Arg	Met	Glu	Ile	Leu	Gly	Cys	Pro	Leu	Pro	Asp	Pro	Asn	Asn	290	295	300
Tyr	Tyr	His	Arg	Arg	Asn	Glu	Met	Thr	Thr	Thr	Asp	Asp	Leu	Asp	305	310	315
Phe	Lys	His	His	Asn	Tyr	Lys	Glu	Met	Arg	Gln	Leu	Met	Lys	Val	320	325	330
Val	Asn	Glu	Met	Cys	Pro	Asn	Ile	Thr	Arg	Ile	Tyr	Asn	Ile	Gly	335	340	345
Lys	Ser	His	Gln	Gly	Leu	Lys	Leu	Tyr	Ala	Val	Glu	Ile	Ser	Asp	350	355	360
His	Pro	Gly	Glu	His	Glu	Val	Gly	Glu	Pro	Glu	Phe	His	Tyr	Ile	365	370	375
Ala	Gly	Ala	His	Gly	Asn	Glu	Val	Leu	Gly	Arg	Glu	Leu	Leu	Leu	380	385	390
Leu	Leu	Val	Gln	Phe	Val	Cys	Gln	Glu	Tyr	Leu	Ala	Arg	Asn	Ala	395	400	405
Arg	Ile	Val	His	Leu	Val	Glu	Glu	Thr	Arg	Ile	His	Val	Leu	Pro			

410	415	420
Ser Leu Asn Pro Asp Gly Tyr Glu Lys	Ala Tyr Glu Gly Gly Ser	
425	430	435
Glu Leu Gly Gly Trp Ser Leu Gly Arg	Trp Thr His Asp Gly Ile	
440	445	450
Asp Ile Asn Asn Asn Phe Pro Asp Leu	Asn Thr Leu Leu Trp Glu	
455	460	465
Ala Glu Asp Arg Gln Asn Val Pro Arg	Lys Val Pro Asn His Tyr	
470	475	480
Ile Ala Ile Pro Glu Trp Phe Leu Ser	Glu Asn Ala Thr Val Ala	
485	490	495
Ala Glu Thr Arg Ala Val Ile Ala Trp	Met Glu Lys Ile Pro Phe	
500	505	510
Val Leu Gly Gly Asn Leu Gln Gly Gly	Glu Leu Val Val Ala Tyr	
515	520	525
Pro Tyr Asp Leu Val Arg Ser Pro Trp	Lys Thr Gln Glu His Thr	
530	535	540
Pro Thr Pro Asp Asp His Val Phe Arg	Trp Leu Ala Tyr Ser Tyr	
545	550	555
Ala Ser Thr His Arg Leu Met Thr Asp	Ala Arg Arg Arg Val Cys	
560	565	570
His Thr Glu Asp Phe Gln Lys Glu Glu	Gly Thr Val Asn Gly Ala	
575	580	585
Ser Trp His Thr Val Ala Gly Ser Leu	Asn Asp Phe Ser Tyr Leu	
590	595	600
His Thr Asn Cys Phe Glu Leu Ser Ile	Tyr Val Gly Cys Asp Lys	
605	610	615
Tyr Pro His Glu Ser Gln Leu Pro Glu	Glu Trp Glu Asn Asn Arg	
620	625	630
Glu Ser Leu Ile Val Phe Met Glu Gln	Val His Arg Gly Ile Lys	
635	640	645
Gly Leu Val Arg Asp Ser His Gly Lys	Gly Ile Pro Asn Ala Ile	
650	655	660
Ile Ser Val Glu Gly Ile Asn His Asp	Ile Arg Thr Ala Asn Asp	
665	670	675
Gly Asp Tyr Trp Arg Leu Leu Asn Pro	Gly Glu Tyr Val Val Thr	
680	685	690
Ala Lys Ala Glu Gly Phe Thr Ala Ser	Thr Lys Asn Cys Met Val	
695	700	705

Gly	Tyr	Asp	Met	Gly	Ala	Thr	Arg	Cys	Asp	Phe	Thr	Leu	Ser	Lys
				710					715					720
Thr	Asn	Met	Ala	Arg	Ile	Arg	Glu	Ile	Met	Glu	Lys	Phe	Gly	Lys
				725					730					735
Gln	Pro	Val	Ser	Leu	Pro	Ala	Arg	Arg	Leu	Lys	Leu	Arg	Gly	Arg
				740					745					750
Lys	Arg	Arg	Gln	Arg	Gly									
				755										

<210> 393
 <211> 4313
 <212> DNA
 <213> Homo Sapien

<400> 393
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 tggcaattct tgatcggcgt ttggacatct cagatcgctt ccaatgaaga 150
 tggccttgcc ttggggtcct gcttgtttca taatcatcta actatgggac 200
 aaggttgtgc cggcagctct gggggaagga gcacggggct gatcaagcca 250
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 ggcggaggca agctggggcc gccttccagg tgttgcagct gcctcaggcg 550
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tcaggtacca gcttgggtcaa ggtcaacgtc ttggactcca atgacaatag 1050
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 cacctggtac gcttctcata aaactgaccg ccacagaccc tgaccaaggc 1150
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 ggttctggat gtcaatgaca acatcccaag catccacgtc acatgggcct 1400
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 ctggctgagc caagagctgg gccacttcag gctgaaaaga actaatggca 1550
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 tatgaagaga tggccggctt tgagttccag gtgatcgcag aggacagcgg 1950
 gcaacccatg cttgcatcca gtgtctctgt gtgggtcagc ctcttggtatg 2000
 ccaatgataa tgccccagag gtgggtccagc ctgtgctcag cgatggaaaa 2050
 gccagcctct ccgtgcttgt gaatgcctcc acaggccacc tgctgggtgcc 2100
 catcgagact cccaatggct tgggcccagc gggcactgac acacctccac 2150
 tggccactca cagctcccgg ccattccttt tgacaaccat tgtggcaaga 2200
 gatgcagact cgggggcaaa tggagagccc ctctacagca tccgcaatgg 2250
 aaatgaagcc cacctcttca tcctcaaccc tcatacgggg cagctgttcg 2300
 tcaatgtcac caatgccagc agcctcattg ggagtgagtg ggagctggag 2350
 atagtagtag aggaccaggg aagccccccc ttacagaccc gagccctgtt 2400
 gagggtcatg tttgtcacca gtgtggacca cctgagggac tcagcccgca 2450

ctggatccaa gaaccagggg cctgaggatc tgtggacaag agctgggttc 3950
 taaaatcttg taactcacta gctagcggcg gcctgagaac tttaggggtga 4000
 ctgatgctac cccacacagag gaggcaagag cccaggact aacagctgac 4050
 tgaccaaagc agccccttgt aagcagctct gagtcttttg gaggacaggg 4100
 acggtttgtg gctgagataa gtgtttcctg gcaaaacata tgtggagcac 4150
 aaagggtcag tcctctggca gaacagatgc cacggagtat cacaggcagg 4200
 aaagggtggc cttcttgggt agcaggagtc agggggctgt accctggggg 4250
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 aaaaaaaaaa aaa 4313

<210> 394
 <211> 1184
 <212> PRT
 <213> Homo Sapien

<400> 394
 Met Met Gln Leu Leu Gln Leu Leu Leu Gly Leu Leu Gly Pro Gly
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 Gly Tyr Leu Phe Leu Leu Gly Asp Cys Gln Glu Val Thr Thr Leu
 20 25 30
 Thr Val Lys Tyr Gln Val Ser Glu Glu Val Pro Ser Gly Thr Val
 35 40 45
 Ile Gly Lys Leu Ser Gln Glu Leu Gly Arg Glu Glu Arg Arg Arg
 50 55 60
 Gln Ala Gly Ala Ala Phe Gln Val Leu Gln Leu Pro Gln Ala Leu
 65 70 75
 Pro Ile Gln Val Asp Ser Glu Glu Gly Leu Leu Ser Thr Gly Arg
 80 85 90
 Arg Leu Asp Arg Glu Gln Leu Cys Arg Gln Trp Asp Pro Cys Leu
 95 100 105
 Val Ser Phe Asp Val Leu Ala Thr Gly Asp Leu Ala Leu Ile His
 110 115 120
 Val Glu Ile Gln Val Leu Asp Ile Asn Asp His Gln Pro Arg Phe
 125 130 135
 Pro Lys Gly Glu Gln Glu Leu Glu Ile Ser Glu Ser Ala Ser Leu
 140 145 150
 Arg Thr Arg Ile Pro Leu Asp Arg Ala Leu Asp Pro Asp Thr Gly
 155 160 165
 Pro Asn Thr Leu His Thr Tyr Thr Leu Ser Pro Ser Glu His Phe

Glu	Val	Ser	Thr	Arg	Glu	Asn	Asn	Leu	Pro	Ser	Leu	His	Leu	Ile	470	475	480
Thr	Ile	Lys	Ala	His	Asp	Ala	Asp	Leu	Gly	Ile	Asn	Gly	Lys	Val	485	490	495
Ser	Tyr	Arg	Ile	Gln	Asp	Ser	Pro	Val	Ala	His	Leu	Val	Ala	Ile	500	505	510
Asp	Ser	Asn	Thr	Gly	Glu	Val	Thr	Ala	Gln	Arg	Ser	Leu	Asn	Tyr	515	520	525
Glu	Glu	Met	Ala	Gly	Phe	Glu	Phe	Gln	Val	Ile	Ala	Glu	Asp	Ser	530	535	540
Gly	Gln	Pro	Met	Leu	Ala	Ser	Ser	Val	Ser	Val	Trp	Val	Ser	Leu	545	550	555
Leu	Asp	Ala	Asn	Asp	Asn	Ala	Pro	Glu	Val	Val	Gln	Pro	Val	Leu	560	565	570
Ser	Asp	Gly	Lys	Ala	Ser	Leu	Ser	Val	Leu	Val	Asn	Ala	Ser	Thr	575	580	585
Gly	His	Leu	Leu	Val	Pro	Ile	Glu	Thr	Pro	Asn	Gly	Leu	Gly	Pro	590	595	600
Ala	Gly	Thr	Asp	Thr	Pro	Pro	Leu	Ala	Thr	His	Ser	Ser	Arg	Pro	605	610	615
Phe	Leu	Leu	Thr	Thr	Ile	Val	Ala	Arg	Asp	Ala	Asp	Ser	Gly	Ala	620	625	630
Asn	Gly	Glu	Pro	Leu	Tyr	Ser	Ile	Arg	Asn	Gly	Asn	Glu	Ala	His	635	640	645
Leu	Phe	Ile	Leu	Asn	Pro	His	Thr	Gly	Gln	Leu	Phe	Val	Asn	Val	650	655	660
Thr	Asn	Ala	Ser	Ser	Leu	Ile	Gly	Ser	Glu	Trp	Glu	Leu	Glu	Ile	665	670	675
Val	Val	Glu	Asp	Gln	Gly	Ser	Pro	Pro	Leu	Gln	Thr	Arg	Ala	Leu	680	685	690
Leu	Arg	Val	Met	Phe	Val	Thr	Ser	Val	Asp	His	Leu	Arg	Asp	Ser	695	700	705
Ala	Arg	Lys	Pro	Gly	Ala	Leu	Ser	Met	Ser	Met	Leu	Thr	Val	Ile	710	715	720
Cys	Leu	Ala	Val	Leu	Leu	Gly	Ile	Phe	Gly	Leu	Ile	Leu	Ala	Leu	725	730	735
Phe	Met	Ser	Ile	Cys	Arg	Thr	Glu	Lys	Lys	Asp	Asn	Arg	Ala	Tyr	740	745	750
Asn	Cys	Arg	Glu	Ala	Glu	Ser	Thr	Tyr	Arg	Gln	Gln	Pro	Lys	Arg			

				755					760					765	
Pro	Gln	Lys	His	Ile	Gln	Lys	Ala	Asp	Ile	His	Leu	Val	Pro	Val	
				770					775					780	
Leu	Arg	Gly	Gln	Ala	Gly	Glu	Pro	Cys	Glu	Val	Gly	Gln	Ser	His	
				785					790					795	
Lys	Asp	Val	Asp	Lys	Glu	Ala	Met	Met	Glu	Ala	Gly	Trp	Asp	Pro	
				800					805					810	
Cys	Leu	Gln	Ala	Pro	Phe	His	Leu	Thr	Pro	Thr	Leu	Tyr	Arg	Thr	
				815					820					825	
Leu	Arg	Asn	Gln	Gly	Asn	Gln	Gly	Ala	Pro	Ala	Glu	Ser	Arg	Glu	
				830					835					840	
Val	Leu	Gln	Asp	Thr	Val	Asn	Leu	Leu	Phe	Asn	His	Pro	Arg	Gln	
				845					850					855	
Arg	Asn	Ala	Ser	Arg	Glu	Asn	Leu	Asn	Leu	Pro	Glu	Pro	Gln	Pro	
				860					865					870	
Ala	Thr	Gly	Gln	Pro	Arg	Ser	Arg	Pro	Leu	Lys	Val	Ala	Gly	Ser	
				875					880					885	
Pro	Thr	Gly	Arg	Leu	Ala	Gly	Asp	Gln	Gly	Ser	Glu	Glu	Ala	Pro	
				890					895					900	
Gln	Arg	Pro	Pro	Ala	Ser	Ser	Ala	Thr	Leu	Arg	Arg	Gln	Arg	His	
				905					910					915	
Leu	Asn	Gly	Lys	Val	Ser	Pro	Glu	Lys	Glu	Ser	Gly	Pro	Arg	Gln	
				920					925					930	
Ile	Leu	Arg	Ser	Leu	Val	Arg	Leu	Ser	Val	Ala	Ala	Phe	Ala	Glu	
				935					940					945	
Arg	Asn	Pro	Val	Glu	Glu	Leu	Thr	Val	Asp	Ser	Pro	Pro	Val	Gln	
				950					955					960	
Gln	Ile	Ser	Gln	Leu	Leu	Ser	Leu	Leu	His	Gln	Gly	Gln	Phe	Gln	
				965					970					975	
Pro	Lys	Pro	Asn	His	Arg	Gly	Asn	Lys	Tyr	Leu	Ala	Lys	Pro	Gly	
				980					985					990	
Gly	Ser	Arg	Ser	Ala	Ile	Pro	Asp	Thr	Asp	Gly	Pro	Ser	Ala	Arg	
				995					1000					1005	
Ala	Gly	Gly	Gln	Thr	Asp	Pro	Glu	Gln	Glu	Glu	Gly	Pro	Leu	Asp	
				1010					1015					1020	
Pro	Glu	Glu	Asp	Leu	Ser	Val	Lys	Gln	Leu	Leu	Glu	Glu	Glu	Leu	
				1025					1030					1035	
Ser	Ser	Leu	Leu	Asp	Pro	Ser	Thr	Gly	Leu	Ala	Leu	Asp	Arg	Leu	
				1040					1045					1050	

Ser	Ala	Pro	Asp	Pro	Ala	Trp	Met	Ala	Arg	Leu	Ser	Leu	Pro	Leu	
				1055					1060					1065	
Thr	Thr	Asn	Tyr	Arg	Asp	Asn	Val	Ile	Ser	Pro	Asp	Ala	Ala	Ala	
				1070					1075					1080	
Thr	Glu	Glu	Pro	Arg	Thr	Phe	Gln	Thr	Phe	Gly	Lys	Ala	Glu	Ala	
				1085					1090					1095	
Pro	Glu	Leu	Ser	Pro	Thr	Gly	Thr	Arg	Leu	Ala	Ser	Thr	Phe	Val	
				1100					1105					1110	
Ser	Glu	Met	Ser	Ser	Leu	Leu	Glu	Met	Leu	Leu	Glu	Gln	Arg	Ser	
				1115					1120					1125	
Ser	Met	Pro	Val	Glu	Ala	Ala	Ser	Glu	Ala	Leu	Arg	Arg	Leu	Ser	
				1130					1135					1140	
Val	Cys	Gly	Arg	Thr	Leu	Ser	Leu	Asp	Leu	Ala	Thr	Ser	Ala	Ala	
				1145					1150					1155	
Ser	Gly	Met	Lys	Val	Gln	Gly	Asp	Pro	Gly	Gly	Lys	Thr	Gly	Thr	
				1160					1165					1170	
Glu	Gly	Lys	Ser	Arg	Gly	Ser	Ser	Ser	Ser	Ser	Arg	Cys	Leu		
				1175					1180						

<210> 395
 <211> 999
 <212> DNA
 <213> Homo Sapien

<400> 395
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 cccagttaaa aggtccaga atcgtgtacc aggcagagaa ctgaagtact 100
 ggggcctcct ccactgggtc cgaatcagta ggtgaccccg ccctggatt 150
 ctggaagacc tcaccatggg acgccccga cctcgtgcgg ccaagacgtg 200
 gatgttcctg ctcttgctgg ggggagcctg ggcaggacac tccagggcac 250
 aggaggacaa ggtgctgggg ggtcatgagt gccaacccca ttcgcagcct 300
 tggcaggcgg ccttgttcca gggccagcaa ctactctgtg gcggtgtcct 350
 tgtaggtggc aactgggtcc ttacagctgc ccactgtaaa aaaccgaaat 400
 acacagtacg cctgggagac cacagcctac agaataaaga tggcccagag 450
 caagaaatac ctgtggttca gtccatccca caccctgct acaacagcag 500
 cgatgtggag gaccacaacc atgatctgat gcttcttcaa ctgcgtgacc 550
 aggcattcct ggggtccaaa gtgaagccca tcagcctggc agatcattgc 600
 acccagcctg gccagaagtg caccgtctca ggctggggca ctgtcaccag 650

tccccgagag aattttcctg acactctcaa ctgtgcagaa gtaaaaatct 700
 ttccccagaa gaagtgtgag gatgcttacc cggggcagat cacagatggc 750
 atggtctgtg caggcagcag caaaggggct gacacgtgcc agggcgattc 800
 tggaggcccc ctggtgtgtg atggtgcact ccagggcatc acatcctggg 850
 gctcagaccc ctgtgggagg tccgacaaac ctggcgtcta taccaacatc 900
 tgccgctacc tggactggat caagaagatc ataggcagca agggctgatt 950
 ctaggataag cactagatct cccttaataa actcacaact ctctggttc 999

<210> 396

<211> 260

<212> PRT

<213> Homo Sapien

<400> 396

Met	Gly	Arg	Pro	Arg	Pro	Arg	Ala	Ala	Lys	Thr	Trp	Met	Phe	Leu	1	5	10	15
Leu	Leu	Leu	Gly	Gly	Ala	Trp	Ala	Gly	His	Ser	Arg	Ala	Gln	Glu	20	25	30	
Asp	Lys	Val	Leu	Gly	Gly	His	Glu	Cys	Gln	Pro	His	Ser	Gln	Pro	35	40	45	
Trp	Gln	Ala	Ala	Leu	Phe	Gln	Gly	Gln	Gln	Leu	Leu	Cys	Gly	Gly	50	55	60	
Val	Leu	Val	Gly	Gly	Asn	Trp	Val	Leu	Thr	Ala	Ala	His	Cys	Lys	65	70	75	
Lys	Pro	Lys	Tyr	Thr	Val	Arg	Leu	Gly	Asp	His	Ser	Leu	Gln	Asn	80	85	90	
Lys	Asp	Gly	Pro	Glu	Gln	Glu	Ile	Pro	Val	Val	Gln	Ser	Ile	Pro	95	100	105	
His	Pro	Cys	Tyr	Asn	Ser	Ser	Asp	Val	Glu	Asp	His	Asn	His	Asp	110	115	120	
Leu	Met	Leu	Leu	Gln	Leu	Arg	Asp	Gln	Ala	Ser	Leu	Gly	Ser	Lys	125	130	135	
Val	Lys	Pro	Ile	Ser	Leu	Ala	Asp	His	Cys	Thr	Gln	Pro	Gly	Gln	140	145	150	
Lys	Cys	Thr	Val	Ser	Gly	Trp	Gly	Thr	Val	Thr	Ser	Pro	Arg	Glu	155	160	165	
Asn	Phe	Pro	Asp	Thr	Leu	Asn	Cys	Ala	Glu	Val	Lys	Ile	Phe	Pro	170	175	180	
Gln	Lys	Lys	Cys	Glu	Asp	Ala	Tyr	Pro	Gly	Gln	Ile	Thr	Asp	Gly	185	190	195	

Met	Val	Cys	Ala	Gly	Ser	Ser	Lys	Gly	Ala	Asp	Thr	Cys	Gln	Gly	
				200					205					210	
Asp	Ser	Gly	Gly	Pro	Leu	Val	Cys	Asp	Gly	Ala	Leu	Gln	Gly	Ile	
				215					220					225	
Thr	Ser	Trp	Gly	Ser	Asp	Pro	Cys	Gly	Arg	Ser	Asp	Lys	Pro	Gly	
				230					235					240	
Val	Tyr	Thr	Asn	Ile	Cys	Arg	Tyr	Leu	Asp	Trp	Ile	Lys	Lys	Ile	
				245					250					255	
Ile	Gly	Ser	Lys	Gly											
				260											

<210> 397
 <211> 1312
 <212> DNA
 <213> Homo Sapien

<400> 397
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 tcggacctgc tactactggg cctgattggg ggccctgactc tcttactgct 100
 gctgacgctg ctggcctttg ccgggtactc agggctactg gctgggggtgg 150
 aagtgagtgc tgggtcacc cccatccgca acgtcactgt ggcctacaag 200
 ttccacatgg ggctctatgg tgagactggg cggtttttca ctgagagctg 250
 cagcatctct cccaagctcc gctccatcgc tgtctactat gacaaccccc 300
 acatggtgcc ccctgataag tgccgatgtg ccgtgggcag catcctgagt 350
 gaagggtgagg aatcgccctc ccctgagctc atcgacctct accagaaatt 400
 tggcttcaag gtgttctcct tcccggcacc cagccatgtg gtgacagcca 450
 ccttccccta caccaccatt ctgtccatct ggctggctac ccgccgtgtc 500
 catcctgcct tggacaccta catcaaggag cggaagctgt gtgcctatcc 550
 tcggctggag atctaccagg aagaccagat ccatttcatg tgcccactgg 600
 cacggcaggg agacttctat gtgcctgaga tgaaggagac agagtggaaa 650
 tggcggggggc ttgtggaggc cattgacacc caggtggatg gcacaggagc 700
 tgacacaatg agtgacacga gttctgtaag cttggaagtg agccctggca 750
 gccgggagac ttcagctgcc aactgtcac ctggggcgag cagccgtggc 800
 tgggatgacg gtgacacccg cagcgagcac agctacagcg agtcagggtgc 850
 cagcggctcc tcttttgagg agctggactt ggagggcgag gggcccttag 900
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ctctgggagc ccactgcccc tgagaagggc aaggagtaac ccatggcctg 1000
 caccctcctg cagtgcagtt gctgaggaac tgagcagact ctccagcaga 1050
 ctctccagcc ctcttctctc ttcctctggg ggaggagggg ttcctgaggg 1100
 acctgacttc cctgctcca ggctcttgc taagccttct cctcactgcc 1150
 ctttaggctc ccagggccag aggagccagg gactattttc tgcaccagcc 1200
 cccagggctg ccgcccctgt tgtgtctttt tttcagactc acagtggagc 1250
 ttccaggacc cagaataaag ccaatgattt acttgtttca cctggaaaaa 1300
 aaaaaaaaaa aa 1312

<210> 398
 <211> 313
 <212> PRT
 <213> Homo Sapien

<400> 398
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 Leu Leu Leu Leu Thr Leu Leu Ala Phe Ala Gly Tyr Ser Gly Leu
 20 25 30
 Leu Ala Gly Val Glu Val Ser Ala Gly Ser Pro Pro Ile Arg Asn
 35 40 45
 Val Thr Val Ala Tyr Lys Phe His Met Gly Leu Tyr Gly Glu Thr
 50 55 60
 Gly Arg Leu Phe Thr Glu Ser Cys Ser Ile Ser Pro Lys Leu Arg
 65 70 75
 Ser Ile Ala Val Tyr Tyr Asp Asn Pro His Met Val Pro Pro Asp
 80 85 90
 Lys Cys Arg Cys Ala Val Gly Ser Ile Leu Ser Glu Gly Glu Glu
 95 100 105
 Ser Pro Ser Pro Glu Leu Ile Asp Leu Tyr Gln Lys Phe Gly Phe
 110 115 120
 Lys Val Phe Ser Phe Pro Ala Pro Ser His Val Val Thr Ala Thr
 125 130 135
 Phe Pro Tyr Thr Thr Ile Leu Ser Ile Trp Leu Ala Thr Arg Arg
 140 145 150
 Val His Pro Ala Leu Asp Thr Tyr Ile Lys Glu Arg Lys Leu Cys
 155 160 165
 Ala Tyr Pro Arg Leu Glu Ile Tyr Gln Glu Asp Gln Ile His Phe
 170 175 180

Met	Cys	Pro	Leu	Ala	Arg	Gln	Gly	Asp	Phe	Tyr	Val	Pro	Glu	Met
				185					190					195
Lys	Glu	Thr	Glu	Trp	Lys	Trp	Arg	Gly	Leu	Val	Glu	Ala	Ile	Asp
				200					205					210
Thr	Gln	Val	Asp	Gly	Thr	Gly	Ala	Asp	Thr	Met	Ser	Asp	Thr	Ser
				215					220					225
Ser	Val	Ser	Leu	Glu	Val	Ser	Pro	Gly	Ser	Arg	Glu	Thr	Ser	Ala
				230					235					240
Ala	Thr	Leu	Ser	Pro	Gly	Ala	Ser	Ser	Arg	Gly	Trp	Asp	Asp	Gly
				245					250					255
Asp	Thr	Arg	Ser	Glu	His	Ser	Tyr	Ser	Glu	Ser	Gly	Ala	Ser	Gly
				260					265					270
Ser	Ser	Phe	Glu	Glu	Leu	Asp	Leu	Glu	Gly	Glu	Gly	Pro	Leu	Gly
				275					280					285
Glu	Ser	Arg	Leu	Asp	Pro	Gly	Thr	Glu	Pro	Leu	Gly	Thr	Thr	Lys
				290					295					300
Trp	Leu	Trp	Glu	Pro	Thr	Ala	Pro	Glu	Lys	Gly	Lys	Glu		
				305					310					

<210> 399
 <211> 1510
 <212> DNA
 <213> Homo Sapien

<400> 399
 ggacgagggc agatctcggt ctggggcaag ccgttgacac tcgctccctg 50
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 ctccagtcct ccagcccctg gccgagagaa gggctcttacc ggccgggatt 150
 gctggaaaca ccaagaggtg gtttttggtt tttaaaactt ctgtttcttg 200
 ggaggggggtg tggcggggca ggatgagcaa ctccgttcct ctgctctggt 250
 tctggagcct ctgctattgc tttgctgcgg ggagccccgt accttttggt 300
 ccagagggac ggctggaaga taagctccac aaacccaaag ctacacagac 350
 tgaggtcaaa ccatctgtga ggtttaacct ccgcacctcc aaggacccag 400
 agcatgaagg atgctacctc tccgtcggcc acagccagcc cttagaagac 450
 tgcagtttca acatgacagc taaaaccttt ttcattcttc acggatggac 500
 gatgagcggg atctttgaaa actggctgca caaactcgtg tcagccctgc 550
 acacaagaga gaaagacgcc aatgtagttg tggttgactg gctccccctg 600
 gccaccagc ttacacgga tgcggtcaat aataccaggg tgggtgggaca 650

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cagcattgcc aggatgctcg actggctgca ggagaaggac gatttttctc 700
tcgggaatgt ccacttgatc ggctacagcc tcggagcgca cgtggccggg 750
tatgcaggca acttcgtgaa aggaacgggtg ggccgaatca caggtttgga 800
tcctgccggg cccatgtttg aaggggccga catccacaag aggctctctc 850
cggacgatgc agattttgtg gatgtcctcc acacctacac gcgttccttc 900
ggcttgagca ttggtattca gatgcctgtg ggccacattg acatctaccc 950
caatgggggt gacttccagc caggctgtgg actcaacgat gtcttgggat 1000
caattgcata tggaacaatc acagaggtgg taaaatgtga gcatgagcga 1050
gccgtccacc tctttgttga ctctctgggtg aatcaggaca agccgagttt 1100
tgctttccag tgcactgact ccaatcgctt caaaaagggg atctgtctga 1150
gctgccgcaa gaaccgttgt aatagcattg gctacaatgc caagaaaatg 1200
aggaacaaga ggaacagcaa aatgtaccta aaaaccggg caggcatgcc 1250
tttcagaggt aaccttcagt ccctggagtg tcctgagga aggcccttaa 1300
tacctccttc ttaataccat gctgcagagc agggcacatc ctagcccagg 1350
agaagtggcc agcacaatcc aatcaaatcg ttgcaaata gattacactg 1400
tgcattgtct aggaaagga atctttacaa aataaacagt gtggaccctt 1450
aataaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1500
aaaaaaaaaa 1510

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<210> 400
<211> 354
<212> PRT
<213> Homo Sapien

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<400> 400
Met Ser Asn Ser Val Pro Leu Leu Cys Phe Trp Ser Leu Cys Tyr
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Cys Phe Ala Ala Gly Ser Pro Val Pro Phe Gly Pro Glu Gly Arg
                20              25              30
Leu Glu Asp Lys Leu His Lys Pro Lys Ala Thr Gln Thr Glu Val
                35              40              45
Lys Pro Ser Val Arg Phe Asn Leu Arg Thr Ser Lys Asp Pro Glu
                50              55              60
His Glu Gly Cys Tyr Leu Ser Val Gly His Ser Gln Pro Leu Glu
                65              70              75
Asp Cys Ser Phe Asn Met Thr Ala Lys Thr Phe Phe Ile Ile His

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	80		85		90
Gly Trp Thr Met Ser Gly Ile Phe Glu Asn Trp Leu His Lys Leu	95		100		105
Val Ser Ala Leu His Thr Arg Glu Lys Asp Ala Asn Val Val Val	110		115		120
Val Asp Trp Leu Pro Leu Ala His Gln Leu Tyr Thr Asp Ala Val	125		130		135
Asn Asn Thr Arg Val Val Gly His Ser Ile Ala Arg Met Leu Asp	140		145		150
Trp Leu Gln Glu Lys Asp Asp Phe Ser Leu Gly Asn Val His Leu	155		160		165
Ile Gly Tyr Ser Leu Gly Ala His Val Ala Gly Tyr Ala Gly Asn	170		175		180
Phe Val Lys Gly Thr Val Gly Arg Ile Thr Gly Leu Asp Pro Ala	185		190		195
Gly Pro Met Phe Glu Gly Ala Asp Ile His Lys Arg Leu Ser Pro	200		205		210
Asp Asp Ala Asp Phe Val Asp Val Leu His Thr Tyr Thr Arg Ser	215		220		225
Phe Gly Leu Ser Ile Gly Ile Gln Met Pro Val Gly His Ile Asp	230		235		240
Ile Tyr Pro Asn Gly Gly Asp Phe Gln Pro Gly Cys Gly Leu Asn	245		250		255
Asp Val Leu Gly Ser Ile Ala Tyr Gly Thr Ile Thr Glu Val Val	260		265		270
Lys Cys Glu His Glu Arg Ala Val His Leu Phe Val Asp Ser Leu	275		280		285
Val Asn Gln Asp Lys Pro Ser Phe Ala Phe Gln Cys Thr Asp Ser	290		295		300
Asn Arg Phe Lys Lys Gly Ile Cys Leu Ser Cys Arg Lys Asn Arg	305		310		315
Cys Asn Ser Ile Gly Tyr Asn Ala Lys Lys Met Arg Asn Lys Arg	320		325		330
Asn Ser Lys Met Tyr Leu Lys Thr Arg Ala Gly Met Pro Phe Arg	335		340		345
Gly Asn Leu Gln Ser Leu Glu Cys Pro	350				

<210> 401

<211> 584

<212> DNA
<213> Homo Sapien

<400> 401
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cttccttctg atggggacct tcctgtcagt ttcccagaca gtccctggccc 150
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acgctcagcc cccagcacgt caccatcagg gactacgggtg tgtcctggta 250
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<210> 402
<211> 123
<212> PRT
<213> Homo Sapien

<400> 402
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20 25 30
Phe Pro Gly Gln Val Ala Gln Leu Ser Cys Thr Leu Ser Pro Gln
35 40 45
His Val Thr Ile Arg Asp Tyr Gly Val Ser Trp Tyr Gln Gln Arg
50 55 60
Ala Gly Ser Ala Pro Arg Tyr Leu Leu Tyr Tyr Arg Ser Glu Glu
65 70 75
Asp His His Arg Pro Ala Asp Ile Pro Asp Arg Phe Ser Ala Ala
80 85 90
Lys Asp Glu Ala His Asn Ala Cys Val Leu Thr Ile Ser Pro Val
95 100 105
Gln Pro Glu Asp Asp Ala Asp Tyr Tyr Cys Ser Val Gly Tyr Gly
110 115 120

Phe Ser Pro

<210> 403

<211> 1964

<212> DNA

<213> Homo Sapien

<400> 403

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cgtactgtgt gtgtgtgcag ccgcttgggtg cagtcagtct ctgcgagctg 200
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 aaaaaaaaaa aaaa 1964

<210> 404
 <211> 436
 <212> PRT
 <213> Homo Sapien

<400> 404
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 35 40 45
 Thr Thr Ile Ser Gln Tyr Asp Lys Glu Val Gly Gln Trp Asn Lys
 50 55 60
 Phe Arg Asp Glu Val Glu Asp Asp Tyr Phe Arg Thr Trp Ser Pro
 65 70 75
 Gly Lys Pro Phe Asp Gln Ala Leu Asp Pro Ala Lys Asp Pro Cys
 80 85 90
 Leu Lys Met Lys Cys Ser Arg His Lys Val Cys Ile Ala Gln Asp
 95 100 105
 Ser Gln Thr Ala Val Cys Ile Ser His Arg Arg Leu Thr His Arg

Met	Lys	Glu	Ala	Gly	Val	Asp	His	Arg	Gln	Trp	Arg	Gly	Pro	Ile
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Leu	Ser	Thr	Cys	Lys	Gln	Cys	Pro	Val	Val	Tyr	Pro	Ser	Pro	Val
				140					145					150
Cys	Gly	Ser	Asp	Gly	His	Thr	Tyr	Ser	Phe	Gln	Cys	Lys	Leu	Glu
				155					160					165
Tyr	Gln	Ala	Cys	Val	Leu	Gly	Lys	Gln	Ile	Ser	Val	Lys	Cys	Glu
				170					175					180
Gly	His	Cys	Pro	Cys	Pro	Ser	Asp	Lys	Pro	Thr	Ser	Thr	Ser	Arg
				185					190					195
Asn	Val	Lys	Arg	Ala	Cys	Ser	Asp	Leu	Glu	Phe	Arg	Glu	Val	Ala
				200					205					210
Asn	Arg	Leu	Arg	Asp	Trp	Phe	Lys	Ala	Leu	His	Glu	Ser	Gly	Ser
				215					220					225
Gln	Asn	Lys	Lys	Thr	Lys	Thr	Leu	Leu	Arg	Pro	Glu	Arg	Ser	Arg
				230					235					240
Phe	Asp	Thr	Ser	Ile	Leu	Pro	Ile	Cys	Lys	Asp	Ser	Leu	Gly	Trp
				245					250					255
Met	Phe	Asn	Arg	Leu	Asp	Thr	Asn	Tyr	Asp	Leu	Leu	Leu	Asp	Gln
				260					265					270
Ser	Glu	Leu	Arg	Ser	Ile	Tyr	Leu	Asp	Lys	Asn	Glu	Gln	Cys	Thr
				275					280					285
Lys	Ala	Phe	Phe	Asn	Ser	Cys	Asp	Thr	Tyr	Lys	Asp	Ser	Leu	Ile
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Ser	Asn	Asn	Glu	Trp	Cys	Tyr	Cys	Phe	Gln	Arg	Gln	Gln	Asp	Pro
				305					310					315
Pro	Cys	Gln	Thr	Glu	Leu	Ser	Asn	Ile	Gln	Lys	Arg	Gln	Gly	Val
				320					325					330
Lys	Lys	Leu	Leu	Gly	Gln	Tyr	Ile	Pro	Leu	Cys	Asp	Glu	Asp	Gly
				335					340					345
Tyr	Tyr	Lys	Pro	Thr	Gln	Cys	His	Gly	Ser	Val	Gly	Gln	Cys	Trp
				350					355					360
Cys	Val	Asp	Arg	Tyr	Gly	Asn	Glu	Val	Met	Gly	Ser	Arg	Ile	Asn
				365					370					375
Gly	Val	Ala	Asp	Cys	Ala	Ile	Asp	Phe	Glu	Ile	Ser	Gly	Asp	Phe
				380					385					390
Ala	Ser	Gly	Asp	Phe	His	Glu	Trp	Thr	Asp	Asp	Glu	Asp	Asp	Glu
				395					400					405

Asp Asp Ile Met Asn Asp Glu Asp Glu Ile Glu Asp Asp Asp Glu
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Asp Glu Gly Asp Asp Asp Asp Gly Gly Asp Asp His Asp Val Tyr
 425 430 435

Ile

<210> 405

<211> 3819

<212> DNA

<213> Homo Sapien

<400> 405

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Met	Thr	Pro	Gln	Ser	Leu	Leu	Gln	Thr	Thr	Leu	Phe	Leu	Leu	Ser	1	5	10	15
Leu	Leu	Phe	Leu	Val	Gln	Gly	Ala	His	Gly	Arg	Gly	His	Arg	Glu	20	25	30	
Asp	Phe	Arg	Phe	Cys	Ser	Gln	Arg	Asn	Gln	Thr	His	Arg	Ser	Ser	35	40	45	
Leu	His	Tyr	Lys	Pro	Thr	Pro	Asp	Leu	Arg	Ile	Ser	Ile	Glu	Asn	50	55	60	
Ser	Glu	Glu	Ala	Leu	Thr	Val	His	Ala	Pro	Phe	Pro	Ala	Ala	His	65	70	75	
Pro	Ala	Ser	Arg	Ser	Phe	Pro	Asp	Pro	Arg	Gly	Leu	Tyr	His	Phe	80	85	90	
Cys	Leu	Tyr	Trp	Asn	Arg	His	Ala	Gly	Arg	Leu	His	Leu	Leu	Tyr	95	100	105	
Gly	Lys	Arg	Asp	Phe	Leu	Leu	Ser	Asp	Lys	Ala	Ser	Ser	Leu	Leu	110	115	120	
Cys	Phe	Gln	His	Gln	Glu	Glu	Ser	Leu	Ala	Gln	Gly	Pro	Pro	Leu	125	130	135	
Leu	Ala	Thr	Ser	Val	Thr	Ser	Trp	Trp	Ser	Pro	Gln	Asn	Ile	Ser	140	145	150	
Leu	Pro	Ser	Ala	Ala	Ser	Phe	Thr	Phe	Ser	Phe	His	Ser	Pro	Pro	155	160	165	
His	Thr	Ala	Ala	His	Asn	Ala	Ser	Val	Asp	Met	Cys	Glu	Leu	Lys	170	175	180	
Arg	Asp	Leu	Gln	Leu	Leu	Ser	Gln	Phe	Leu	Lys	His	Pro	Gln	Lys	185	190	195	
Ala	Ser	Arg	Arg	Pro	Ser	Ala	Ala	Pro	Ala	Ser	Gln	Gln	Leu	Gln	200	205	210	
Ser	Leu	Glu	Ser	Lys	Leu	Thr	Ser	Val	Arg	Phe	Met	Gly	Asp	Met	215	220	225	
Val	Ser	Phe	Glu	Glu	Asp	Arg	Ile	Asn	Ala	Thr	Val	Trp	Lys	Leu	230	235	240	
Gln	Pro	Thr	Ala	Gly	Leu	Gln	Asp	Leu	His	Ile	His	Ser	Arg	Gln	245	250	255	
Glu	Glu	Glu	Gln	Ser	Glu	Ile	Met	Glu	Tyr	Ser	Val	Leu	Leu	Pro	260	265	270	
Arg	Thr	Leu	Phe	Gln	Arg	Thr	Lys	Gly	Arg	Ser	Gly	Glu	Ala	Glu	275	280	285	
Lys	Arg	Leu	Leu	Leu	Val	Asp	Phe	Ser	Ser	Gln	Ala	Leu	Phe	Gln				

Met	Ala	Met	Leu	Ala	Thr	Met	Val	Val	Gln	Ile	Leu	Arg	Leu	Arg
			590						595					600
Pro	His	Thr	Gln	Lys	Trp	Ser	His	Val	Leu	Thr	Leu	Leu	Gly	Leu
			605						610					615
Ser	Leu	Val	Leu	Gly	Leu	Pro	Trp	Ala	Leu	Ile	Phe	Phe	Ser	Phe
			620						625					630
Ala	Ser	Gly	Thr	Phe	Gln	Leu	Val	Val	Leu	Tyr	Leu	Phe	Ser	Ile
			635						640					645
Ile	Thr	Ser	Phe	Gln	Gly	Phe	Leu	Ile	Phe	Ile	Trp	Tyr	Trp	Ser
			650						655					660
Met	Arg	Leu	Gln	Ala	Arg	Gly	Gly	Pro	Ser	Pro	Leu	Lys	Ser	Asn
			665						670					675
Ser	Asp	Ser	Ala	Arg	Leu	Pro	Ile	Ser	Ser	Gly	Ser	Thr	Ser	Ser
			680						685					690

Ser Arg Ile

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 <211> 950
 <212> DNA
 <213> Homo Sapien

<400> 407
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<210> 408
<211> 146
<212> PRT
<213> Homo Sapien

<400> 408
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His Asp Phe Gly Leu Asp Gly Tyr Arg Gly Tyr Ser Leu Ala Asp
35 40 45
Trp Val Cys Leu Ala Tyr Phe Thr Ser Gly Phe Asn Ala Ala Ala
50 55 60
Leu Asp Tyr Glu Ala Asp Gly Ser Thr Asn Asn Gly Ile Phe Gln
65 70 75
Ile Asn Ser Arg Arg Trp Cys Ser Asn Leu Thr Pro Asn Val Pro
80 85 90
Asn Val Cys Arg Met Tyr Cys Ser Asp Leu Leu Asn Pro Asn Leu
95 100 105
Lys Asp Thr Val Ile Cys Ala Met Lys Ile Thr Gln Glu Pro Gln
110 115 120
Gly Leu Gly Tyr Trp Glu Ala Trp Arg His His Cys Gln Gly Lys
125 130 135
Asp Leu Thr Glu Trp Val Asp Gly Cys Asp Phe
140 145

<210> 409
<211> 3617
<212> DNA
<213> Homo Sapien

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gctctgcctc cggtgctgct gcctggggcg gccggcttca caccttccct 200
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<210> 410

<211> 229

<212> PRT

<213> Homo Sapien

<400> 410

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Ser	Leu	Asp	Ser	Asp	Phe	Thr	Phe	Thr	Leu	Pro	Ala	Gly	Gln	Lys
				35					40					45
Glu	Cys	Phe	Tyr	Gln	Pro	Met	Pro	Leu	Lys	Ala	Ser	Leu	Glu	Ile
				50					55					60
Glu	Tyr	Gln	Val	Leu	Asp	Gly	Ala	Gly	Leu	Asp	Ile	Asp	Phe	His
				65					70					75
Leu	Ala	Ser	Pro	Glu	Gly	Lys	Thr	Leu	Val	Phe	Glu	Gln	Arg	Lys
				80					85					90
Ser	Asp	Gly	Val	His	Thr	Val	Glu	Thr	Glu	Val	Gly	Asp	Tyr	Met
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Phe	Cys	Phe	Asp	Asn	Thr	Phe	Ser	Thr	Ile	Ser	Glu	Lys	Val	Ile
				110					115					120
Phe	Phe	Glu	Leu	Ile	Leu	Asp	Asn	Met	Gly	Glu	Gln	Ala	Gln	Glu
				125					130					135
Gln	Glu	Asp	Trp	Lys	Lys	Tyr	Ile	Thr	Gly	Thr	Asp	Ile	Leu	Asp

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Met Lys Leu Glu Asp Ile Leu Glu Ser Ile Asn Ser Ile Lys Ser					
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Arg Leu Ser Lys Ser Gly His Ile Gln Ile Leu Leu Arg Ala Phe					
	170		175		180
Glu Ala Arg Asp Arg Asn Ile Gln Glu Ser Asn Phe Asp Arg Val					
	185		190		195
Asn Phe Trp Ser Met Val Asn Leu Val Val Met Val Val Val Ser					
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<210> 411
 <211> 4420
 <212> DNA
 <213> Homo Sapien

<400> 411
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<210> 412

<211> 1184

<212> PRT

<213> Homo Sapien

<400> 412

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Arg	Arg	Val	Gln	Pro	Gly	Lys	Lys	Asn	Pro	Ser	Ile	Phe	Ala	Lys
				35					40					45
Pro	Ala	Asp	Thr	Leu	Glu	Ser	Pro	Gly	Glu	Trp	Thr	Thr	Trp	Phe
				50					55					60
Asn	Ile	Asp	Tyr	Pro	Gly	Gly	Lys	Gly	Asp	Tyr	Glu	Arg	Leu	Asp
				65					70					75
Ala	Ile	Arg	Phe	Tyr	Tyr	Gly	Asp	Arg	Val	Cys	Ala	Arg	Pro	Leu
				80					85					90
Arg	Leu	Glu	Ala	Arg	Thr	Thr	Asp	Trp	Thr	Pro	Ala	Gly	Ser	Thr
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Gly	Gln	Val	Val	His	Gly	Ser	Pro	Arg	Glu	Gly	Phe	Trp	Cys	Leu

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Asn	Arg	Glu	Gln	Arg	Pro	Gly	Gln	Asn	Cys	Ser	Asn	Tyr	Thr	Val	
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Arg	Phe	Leu	Cys	Pro	Pro	Gly	Ser	Leu	Arg	Arg	Asp	Thr	Glu	Arg	
				140					145					150	
Ile	Trp	Ser	Pro	Trp	Ser	Pro	Trp	Ser	Lys	Cys	Ser	Ala	Ala	Cys	
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Gly	Gln	Thr	Gly	Val	Gln	Thr	Arg	Thr	Arg	Ile	Cys	Leu	Ala	Glu	
				170					175					180	
Met	Val	Ser	Leu	Cys	Ser	Glu	Ala	Ser	Glu	Glu	Gly	Gln	His	Cys	
				185					190					195	
Met	Gly	Gln	Asp	Cys	Thr	Ala	Cys	Asp	Leu	Thr	Cys	Pro	Met	Gly	
				200					205					210	
Gln	Val	Asn	Ala	Asp	Cys	Asp	Ala	Cys	Met	Cys	Gln	Asp	Phe	Met	
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Leu	His	Gly	Ala	Val	Ser	Leu	Pro	Gly	Gly	Ala	Pro	Ala	Ser	Gly	
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Ala	Ala	Ile	Tyr	Leu	Leu	Thr	Lys	Thr	Pro	Lys	Leu	Leu	Thr	Gln	
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Gly	Lys	Ser	Ile	Leu	Lys	Ile	Thr	Lys	Val	Lys	Phe	Ala	Pro	Ile	
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Val	Leu	Thr	Met	Pro	Lys	Thr	Ser	Leu	Lys	Ala	Ala	Thr	Ile	Lys	
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Ala	Glu	Phe	Val	Arg	Ala	Glu	Thr	Pro	Tyr	Met	Val	Met	Asn	Pro	
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Glu	Thr	Lys	Ala	Arg	Arg	Ala	Gly	Gln	Ser	Val	Ser	Leu	Cys	Cys	
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Lys	Ala	Thr	Gly	Lys	Pro	Arg	Pro	Asp	Lys	Tyr	Phe	Trp	Tyr	His	
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Asn	Asp	Thr	Leu	Leu	Asp	Pro	Ser	Leu	Tyr	Lys	His	Glu	Ser	Lys	
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Leu	Val	Leu	Arg	Lys	Leu	Gln	Gln	His	Gln	Ala	Gly	Glu	Tyr	Phe	
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Cys	Lys	Ala	Gln	Ser	Asp	Ala	Gly	Ala	Val	Lys	Ser	Lys	Val	Ala	
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Gln	Leu	Ile	Val	Thr	Ala	Ser	Asp	Glu	Thr	Pro	Cys	Asn	Pro	Val	
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Pro	Glu	Ser	Tyr	Leu	Ile	Arg	Leu	Pro	His	Asp	Cys	Phe	Gln	Asn	
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Ala	Thr	Asn	Ser	Phe	Tyr	Tyr	Asp	Val	Gly	Arg	Cys	Pro	Val	Lys	
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Thr	Cys	Ala	Gly	Gln	Gln	Asp	Asn	Gly	Ile	Arg	Cys	Arg	Asp	Ala	
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Val	Gln	Asn	Cys	Cys	Gly	Ile	Ser	Lys	Thr	Glu	Glu	Arg	Glu	Ile	
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Ser	Cys	Gln	Arg	Cys	Thr	Glu	Thr	Arg	Ser	Ile	Val	Arg	Gly	Arg	
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Tyr	Met	Gly	Asn	Ser	Arg	Val	Ser	Met	Thr	Gly	Tyr	Lys	Gly	Thr	
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Phe	Thr	Leu	His	Val	Pro	Gln	Asp	Thr	Glu	Arg	Leu	Val	Leu	Thr	
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Leu	Glu	Ile	Pro	Ser	Arg	Ser	Phe	Tyr	Arg	Gln	Asn	Gly	Glu	Pro	
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Tyr	Ile	Gly	Lys	Val	Lys	Ala	Ser	Val	Thr	Phe	Leu	Asp	Pro	Arg	
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Ser	Val	Asp	Phe	Arg	Asp	Glu	Val	Thr	Ser	Glu	Pro	Leu	Asn	Ala	
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Arg	Asn	Lys	Arg	Glu	Asp	Arg	Thr	Phe	Leu	Val	Gly	Asn	Leu	Glu					
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Ile	Arg	Glu	Arg	Arg	Leu	Phe	Asn	Leu	Asp	Val	Pro	Glu	Ser	Arg					
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Arg	Cys	Phe	Val	Lys	Val	Arg	Ala	Tyr	Arg	Ser	Glu	Arg	Phe	Leu					
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Glu	Pro	Arg	Thr	Gly	Phe	Leu	Ser	Asn	Pro	Arg	Ala	Trp	Gly	Arg					
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Phe	Asp	Ser	Val	Ile	Thr	Gly	Pro	Asn	Gly	Ala	Cys	Val	Pro	Ala					
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Lys	Phe	Asn	Pro	Asn	Ala	Ile	Gly	Val	Pro	Gln	Pro	Tyr	Leu	Asn					
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Lys	Leu	Asn	Tyr	Arg	Arg	Thr	Asp	His	Glu	Asp	Pro	Arg	Val	Lys					
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Lys	Thr	Ala	Phe	Gln	Ile	Ser	Met	Ala	Lys	Pro	Arg	Pro	Asn	Ser					
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Ala	Glu	Glu	Ser	Asn	Gly	Pro	Ile	Tyr	Ala	Phe	Glu	Asn	Leu	Arg					
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Thr	His	Arg	Arg	Thr	Val	Gly	Lys	Leu	Tyr	Gly	Ile	Arg	Asp	Val					
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Phe	Asp	Gly	Thr	Ser	Asp	Gly	Ser	Ser	Arg	Ile	Met	Lys	Ser	Asn	
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Ser	Leu	Arg	Phe	Pro	Arg	Val	Ala	Gln	Gln	Pro	Leu	Ile	Asn		
			1175						1180						

<210> 413
 <211> 595
 <212> DNA
 <213> Homo Sapien

<400> 413
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 gctgctttcc atcttttctc ccagccccag gacactgact ctgtacagga 100
 tggggccgct ctcttgcttc cttctcatcc taatccccct tctccagctg 150
 atcaaccogg ggagtactca gtgttcctta gactccgtta tggataagaa 200
 gatcaaggat gttctcaaca gtctagagta cagtcctctt cctataagca 250
 agaagctctc gtgtgctagt gtcaaaagcc aaggcagacc gtcctcctgc 300
 cctgctggga tggctgtcac tggctgtgct tgtggctatg gctgtgggtc 350

gtgggatgtt cagctggaaa ccacctgcca ctgccagtgc agtgtggtgg 400
 actggaccac tgcccgtgc tgccacctga cctgacaggg aggaggctga 450
 gaactcagtt ttgtgaccat gacagtaatg aaaccagggc cccaaccaag 500
 aaatctaact caaacgtccc acttcatttg ttccattcct gattcttggg 550
 taataaagac aaactttgta cctcaaaaaa aaaaaaaaaa aaaaa 595

<210> 414
 <211> 111
 <212> PRT
 <213> Homo Sapien

<400> 414
 Met Gly Pro Ser Ser Cys Leu Leu Leu Ile Leu Ile Pro Leu Leu
 1 5 10 15
 Gln Leu Ile Asn Pro Gly Ser Thr Gln Cys Ser Leu Asp Ser Val
 20 25 30
 Met Asp Lys Lys Ile Lys Asp Val Leu Asn Ser Leu Glu Tyr Ser
 35 40 45
 Pro Ser Pro Ile Ser Lys Lys Leu Ser Cys Ala Ser Val Lys Ser
 50 55 60
 Gln Gly Arg Pro Ser Ser Cys Pro Ala Gly Met Ala Val Thr Gly
 65 70 75
 Cys Ala Cys Gly Tyr Gly Cys Gly Ser Trp Asp Val Gln Leu Glu
 80 85 90
 Thr Thr Cys His Cys Gln Cys Ser Val Val Asp Trp Thr Thr Ala
 95 100 105
 Arg Cys Cys His Leu Thr
 110

<210> 415
 <211> 1621
 <212> DNA
 <213> Homo Sapien

<400> 415
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 cccccccggt gtgaggcggc ctcacagggc cgggtgggct ggcgagccga 100
 cgcggcggcg gaggaggctg tgaggagtgt gtggaacagg acccgggaca 150
 gaggaaccat ggctccgcag aacctgagca ccttttgcct gttgctgcta 200
 tacctcatcg gggcggtgat tgccggacga gatttctata agatcttggg 250
 ggtgcctcga agtgcctcta taaaggatat taaaaaggcc tataggaaac 300

<400> 416

Met	Ala	Pro	Gln	Asn	Leu	Ser	Thr	Phe	Cys	Leu	Leu	Leu	Leu	Tyr
1				5					10					15
Leu	Ile	Gly	Ala	Val	Ile	Ala	Gly	Arg	Asp	Phe	Tyr	Lys	Ile	Leu
				20					25					30
Gly	Val	Pro	Arg	Ser	Ala	Ser	Ile	Lys	Asp	Ile	Lys	Lys	Ala	Tyr
				35					40					45
Arg	Lys	Leu	Ala	Leu	Gln	Leu	His	Pro	Asp	Arg	Asn	Pro	Asp	Asp
				50					55					60
Pro	Gln	Ala	Gln	Glu	Lys	Phe	Gln	Asp	Leu	Gly	Ala	Ala	Tyr	Glu
				65					70					75
Val	Leu	Ser	Asp	Ser	Glu	Lys	Arg	Lys	Gln	Tyr	Asp	Thr	Tyr	Gly
				80					85					90
Glu	Glu	Gly	Leu	Lys	Asp	Gly	His	Gln	Ser	Ser	His	Gly	Asp	Ile
				95					100					105
Phe	Ser	His	Phe	Phe	Gly	Asp	Phe	Gly	Phe	Met	Phe	Gly	Gly	Thr
				110					115					120
Pro	Arg	Gln	Gln	Asp	Arg	Asn	Ile	Pro	Arg	Gly	Ser	Asp	Ile	Ile
				125					130					135
Val	Asp	Leu	Glu	Val	Thr	Leu	Glu	Glu	Val	Tyr	Ala	Gly	Asn	Phe
				140					145					150
Val	Glu	Val	Val	Arg	Asn	Lys	Pro	Val	Ala	Arg	Gln	Ala	Pro	Gly
				155					160					165
Lys	Arg	Lys	Cys	Asn	Cys	Arg	Gln	Glu	Met	Arg	Thr	Thr	Gln	Leu
				170					175					180
Gly	Pro	Gly	Arg	Phe	Gln	Met	Thr	Gln	Glu	Val	Val	Cys	Asp	Glu
				185					190					195
Cys	Pro	Asn	Val	Lys	Leu	Val	Asn	Glu	Glu	Arg	Thr	Leu	Glu	Val
				200					205					210
Glu	Ile	Glu	Pro	Gly	Val	Arg	Asp	Gly	Met	Glu	Tyr	Pro	Phe	Ile
				215					220					225
Gly	Glu	Gly	Glu	Pro	His	Val	Asp	Gly	Glu	Pro	Gly	Asp	Leu	Arg
				230					235					240
Phe	Arg	Ile	Lys	Val	Val	Lys	His	Pro	Ile	Phe	Glu	Arg	Arg	Gly
				245					250					255
Asp	Asp	Leu	Tyr	Thr	Asn	Val	Thr	Ile	Ser	Leu	Val	Glu	Ser	Leu
				260					265					270
Val	Gly	Phe	Glu	Met	Asp	Ile	Thr	His	Leu	Asp	Gly	His	Lys	Val
				275					280					285

His	Ile	Ser	Arg	Asp	Lys	Ile	Thr	Arg	Pro	Gly	Ala	Lys	Leu	Trp
				290					295					300
Lys	Lys	Gly	Glu	Gly	Leu	Pro	Asn	Phe	Asp	Asn	Asn	Asn	Ile	Lys
				305					310					315
Gly	Ser	Leu	Ile	Ile	Thr	Phe	Asp	Val	Asp	Phe	Pro	Lys	Glu	Gln
				320					325					330
Leu	Thr	Glu	Glu	Ala	Arg	Glu	Gly	Ile	Lys	Gln	Leu	Leu	Lys	Gln
				335					340					345
Gly	Ser	Val	Gln	Lys	Val	Tyr	Asn	Gly	Leu	Gln	Gly	Tyr		
				350					355					

<210> 417
 <211> 1547
 <212> DNA
 <213> Homo Sapien

<400> 417
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 gagaggggccc agcccgcccc gggcaggatg accaaggccc ggctgttccg 150
 gctgtggctg gtgctggggt cgggtgttcat gatcctgctg atcatcgtgt 200
 actgggacag cgcaggcgcc ggcacttct acttgcacac gtccttctct 250
 aggccgcaca cggggccgcc gctgcccacg cccgggcccgg acagggacag 300
 ggagctcacg gccgactccg atgtcgacga gtttctggac aagtttctca 350
 gtgctggcgt gaagcagagc gaccttccca gaaaggagac ggagcagccg 400
 cctgcgccgg ggagcatgga ggagagcgtg agaggctacg actgggtccc 450
 gcgcgacgcc cggcgcagcc cagaccaggg ccggcagcag gcggagcgga 500
 ggagcgtgct gcggggcttc tgcgccaact ccagcctggc cttccccacc 550
 aaggagcgcg cattcgacga catccccaac tcggagctga gccacctgat 600
 cgtggacgac cggcacgggg ccatctactg ctacgtgcc aaggtggcct 650
 gcaccaactg gaagcgcgtg atgatcgtgc tgagcggaag cctgctgcac 700
 cgcggtgcgc cctaccgcga cccgctgcgc atcccgcgc agcacgtgca 750
 caacgccagc gcgcacctga cttcaacaa gttctggcgc cgctacggga 800
 agctctcccc ccacctcatg aaggtcaagc tcaagaagta caccaagttc 850
 ctcttcgtgc gcgaccctt cgtgcgcctg atctccgcct tccgcagcaa 900
 gttcgagctg gagaacgagg agttctaccg caagttcgcc gtgcccattgc 950

tgcggctgta cgccaaccac accagcctgc ccgcctcggc gcgcgaggcc 1000
 ttccgcgctg gcctcaaggt gtccttcgcc aacttcatcc agtacctgct 1050
 ggacccgcac acggagaagc tggcgccctt caacgagcac tggcggcagg 1100
 tgtaccgcct ctgccacccg tgccagatcg actacgactt cgtggggaag 1150
 ctggagactc tggacgagga cgccgcgcag ctgctgcagc tactccaggt 1200
 ggaccggcag ctccgcttcc ccccgagcta ccggaacagg accgccagca 1250
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 ctgtataaac tctacgaggc cgactttggtt ctcttcggct accccaagcc 1350
 cgaaaacctc ctccgagact gaaagctttc gcgttgcttt ttctcgctg 1400
 cctggaacct gacgcacgcg cactccagtt tttttatgac ctacgatttt 1450
 gcaatctggg cttcttggtc actccactgc ctctatccat tgagtactgt 1500
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<210> 418

<211> 414

<212> PRT

<213> Homo Sapien

<400> 418

Met	Thr	Lys	Ala	Arg	Leu	Phe	Arg	Leu	Trp	Leu	Val	Leu	Gly	Ser
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Val	Phe	Met	Ile	Leu	Leu	Ile	Ile	Val	Tyr	Trp	Asp	Ser	Ala	Gly
				20					25					30
Ala	Ala	His	Phe	Tyr	Leu	His	Thr	Ser	Phe	Ser	Arg	Pro	His	Thr
				35					40					45
Gly	Pro	Pro	Leu	Pro	Thr	Pro	Gly	Pro	Asp	Arg	Asp	Arg	Glu	Leu
				50					55					60
Thr	Ala	Asp	Ser	Asp	Val	Asp	Glu	Phe	Leu	Asp	Lys	Phe	Leu	Ser
				65					70					75
Ala	Gly	Val	Lys	Gln	Ser	Asp	Leu	Pro	Arg	Lys	Glu	Thr	Glu	Gln
				80					85					90
Pro	Pro	Ala	Pro	Gly	Ser	Met	Glu	Glu	Ser	Val	Arg	Gly	Tyr	Asp
				95					100					105
Trp	Ser	Pro	Arg	Asp	Ala	Arg	Arg	Ser	Pro	Asp	Gln	Gly	Arg	Gln
				110					115					120
Gln	Ala	Glu	Arg	Arg	Ser	Val	Leu	Arg	Gly	Phe	Cys	Ala	Asn	Ser
				125					130					135
Ser	Leu	Ala	Phe	Pro	Thr	Lys	Glu	Arg	Ala	Phe	Asp	Asp	Ile	Pro

				140					145					150	
Asn	Ser	Glu	Leu	Ser	His	Leu	Ile	Val	Asp	Asp	Arg	His	Gly	Ala	
				155					160					165	
Ile	Tyr	Cys	Tyr	Val	Pro	Lys	Val	Ala	Cys	Thr	Asn	Trp	Lys	Arg	
				170					175					180	
Val	Met	Ile	Val	Leu	Ser	Gly	Ser	Leu	Leu	His	Arg	Gly	Ala	Pro	
				185					190					195	
Tyr	Arg	Asp	Pro	Leu	Arg	Ile	Pro	Arg	Glu	His	Val	His	Asn	Ala	
				200					205					210	
Ser	Ala	His	Leu	Thr	Phe	Asn	Lys	Phe	Trp	Arg	Arg	Tyr	Gly	Lys	
				215					220					225	
Leu	Ser	Arg	His	Leu	Met	Lys	Val	Lys	Leu	Lys	Lys	Tyr	Thr	Lys	
				230					235					240	
Phe	Leu	Phe	Val	Arg	Asp	Pro	Phe	Val	Arg	Leu	Ile	Ser	Ala	Phe	
				245					250					255	
Arg	Ser	Lys	Phe	Glu	Leu	Glu	Asn	Glu	Glu	Phe	Tyr	Arg	Lys	Phe	
				260					265					270	
Ala	Val	Pro	Met	Leu	Arg	Leu	Tyr	Ala	Asn	His	Thr	Ser	Leu	Pro	
				275					280					285	
Ala	Ser	Ala	Arg	Glu	Ala	Phe	Arg	Ala	Gly	Leu	Lys	Val	Ser	Phe	
				290					295					300	
Ala	Asn	Phe	Ile	Gln	Tyr	Leu	Leu	Asp	Pro	His	Thr	Glu	Lys	Leu	
				305					310					315	
Ala	Pro	Phe	Asn	Glu	His	Trp	Arg	Gln	Val	Tyr	Arg	Leu	Cys	His	
				320					325					330	
Pro	Cys	Gln	Ile	Asp	Tyr	Asp	Phe	Val	Gly	Lys	Leu	Glu	Thr	Leu	
				335					340					345	
Asp	Glu	Asp	Ala	Ala	Gln	Leu	Leu	Gln	Leu	Leu	Gln	Val	Asp	Arg	
				350					355					360	
Gln	Leu	Arg	Phe	Pro	Pro	Ser	Tyr	Arg	Asn	Arg	Thr	Ala	Ser	Ser	
				365					370					375	
Trp	Glu	Glu	Asp	Trp	Phe	Ala	Lys	Ile	Pro	Leu	Ala	Trp	Arg	Gln	
				380					385					390	
Gln	Leu	Tyr	Lys	Leu	Tyr	Glu	Ala	Asp	Phe	Val	Leu	Phe	Gly	Tyr	
				395					400					405	
Pro	Lys	Pro	Glu	Asn	Leu	Leu	Arg	Asp							
				410											

<210> 419
 <211> 1781

<212> DNA

<213> Homo Sapien

<400> 419

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tttcttcctt ctggaaatct ttgactgtgg gtagttatct atttctgaat 150
aagagcgtcc acgcatcatg gacctcgcgg gactgctgaa gtctcagttc 200
ctgtgccacc tggctctctg ctacgtcttt attgcctcag ggctaatacat 250
caacaccatt cagctcttca ctctcctcct ctggcccatt aacaagcagc 300
tcttccggaa gatcaactgc agactgtcct attgcatctc aagccagctg 350
gtgatgctgc tggagtgggtg gtcgggcacg gaatgcacca tcttcacgga 400
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ctccgggact accccgagaa gtattttttc ctgattcact gtgagggcac 700
acggttcacg gagaagaagc atgagatcag catgcagggtg gcccgggcca 750
aggggctgcc tcgcctcaag catcacctgt tgccacgaac caagggttc 800
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tacactcaat ttcagaaata atgaaaatcc aacactgctg ggagtcctaa 900
acggaaagaa ataccatgca gatttgtatg ttaggaggat cccactggaa 950
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ccaggagaag gatgcctttc aggaggagta ctacaggacg ggcaccttcc 1050
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ctgttttggg cctcgtggt gctctaccct ttcttccagt tcctggtcag 1150
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tctttgtggc ctccgtggga gttcgatgga tgattggtgt gacggaaatt 1250
gacaagggct ctgcctacgg caactctgac agcaagcaga aactgaatga 1300
ctgactcagg gaggtgtcac catccgaagg gaaccttggg gaactgggtg 1350

cctctgcata tcctccttag tgggacacgg tgacaaaggc tgggtgagcc 1400
cctgctgggc acggcggaag tcacgacctc tccagccagg gagtctggtc 1450
tcaaggccgg atggggagga agatgttttg taatcttttt ttcccatgt 1500
gcttttagtgg gctttggttt tctttttgtg cgagtgtgtg tgagaatggc 1550
tgtgtggtga gtgtgaactt tgttctgtga tcatagaaag ggtatttttag 1600
gctgcagggg agggcagggc tggggaccga aggggacaag ttcccctttc 1650
atccttttgg gctgagtttt ctgtaaccct tggttgccag agataaagtg 1700
aaaagtgctt taggtgagat gactaaatta tgcctccaag aaaaaaaaaat 1750
taaagtgctt ttctgggtca aaaaaaaaaa a 1781

<210> 420

<211> 378

<212> PRT

<213> Homo Sapien

<400> 420

Met	Asp	Leu	Ala	Gly	Leu	Leu	Lys	Ser	Gln	Phe	Leu	Cys	His	Leu	1	5	10	15
Val	Phe	Cys	Tyr	Val	Phe	Ile	Ala	Ser	Gly	Leu	Ile	Ile	Asn	Thr	20	25	30	
Ile	Gln	Leu	Phe	Thr	Leu	Leu	Leu	Trp	Pro	Ile	Asn	Lys	Gln	Leu	35	40	45	
Phe	Arg	Lys	Ile	Asn	Cys	Arg	Leu	Ser	Tyr	Cys	Ile	Ser	Ser	Gln	50	55	60	
Leu	Val	Met	Leu	Leu	Glu	Trp	Trp	Ser	Gly	Thr	Glu	Cys	Thr	Ile	65	70	75	
Phe	Thr	Asp	Pro	Arg	Ala	Tyr	Leu	Lys	Tyr	Gly	Lys	Glu	Asn	Ala	80	85	90	
Ile	Val	Val	Leu	Asn	His	Lys	Phe	Glu	Ile	Asp	Phe	Leu	Cys	Gly	95	100	105	
Trp	Ser	Leu	Ser	Glu	Arg	Phe	Gly	Leu	Leu	Gly	Gly	Ser	Lys	Val	110	115	120	
Leu	Ala	Lys	Lys	Glu	Leu	Ala	Tyr	Val	Pro	Ile	Ile	Gly	Trp	Met	125	130	135	
Trp	Tyr	Phe	Thr	Glu	Met	Val	Phe	Cys	Ser	Arg	Lys	Trp	Glu	Gln	140	145	150	
Asp	Arg	Lys	Thr	Val	Ala	Thr	Ser	Leu	Gln	His	Leu	Arg	Asp	Tyr	155	160	165	
Pro	Glu	Lys	Tyr	Phe	Phe	Leu	Ile	His	Cys	Glu	Gly	Thr	Arg	Phe				

	170	175	180
Thr Glu Lys Lys	His Glu Ile Ser Met	Gln Val Ala Arg Ala	Lys
	185	190	195
Gly Leu Pro Arg	Leu Lys His His Leu	Leu Pro Arg Thr Lys	Gly
	200	205	210
Phe Ala Ile Thr	Val Arg Ser Leu Arg	Asn Val Val Ser Ala	Val
	215	220	225
Tyr Asp Cys Thr	Leu Asn Phe Arg Asn	Asn Glu Asn Pro Thr	Leu
	230	235	240
Leu Gly Val Leu	Asn Gly Lys Lys Tyr	His Ala Asp Leu Tyr	Val
	245	250	255
Arg Arg Ile Pro	Leu Glu Asp Ile Pro	Glu Asp Asp Asp Glu	Cys
	260	265	270
Ser Ala Trp Leu	His Lys Leu Tyr Gln	Glu Lys Asp Ala Phe	Gln
	275	280	285
Glu Glu Tyr Tyr	Arg Thr Gly Thr Phe	Pro Glu Thr Pro Met	Val
	290	295	300
Pro Pro Arg Arg	Pro Trp Thr Leu Val	Asn Trp Leu Phe Trp	Ala
	305	310	315
Ser Leu Val Leu	Tyr Pro Phe Phe Gln	Phe Leu Val Ser Met	Ile
	320	325	330
Arg Ser Gly Ser	Ser Leu Thr Leu Ala	Ser Phe Ile Leu Val	Phe
	335	340	345
Phe Val Ala Ser	Val Gly Val Arg Trp	Met Ile Gly Val Thr	Glu
	350	355	360
Ile Asp Lys Gly	Ser Ala Tyr Gly Asn	Ser Asp Ser Lys Gln	Lys
	365	370	375

Leu Asn Asp

<210> 421
 <211> 1355
 <212> DNA
 <213> Homo Sapien

<400> 421
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 gctccgagga ggtccccgga gggccctggg gacgctgggt gcactggagc 150
 aggagacccc tcttcttggc cctggctgtc ctggtcacca cagtcctttg 200

ggctgtgatt ctgagtatcc tattgtccaa ggcctccacg gagcgcgcg 250
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 gcggcgctgg gtgccctgaa ggaggaggtc ggagactgcc acagctgctg 350
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 cgcaggcgaa gctgatggag caggagagcg ccctgcggga actgcgtgag 450
 cgcgtgaccc agggcttggc tgaagccggc aggggcccgtg aggacgtccg 500
 cactgagctg ttccggggcg tggaggccgt gaggctccag aacaactcct 550
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 agaactgtgt catgatgctg cacacggggc tgtggaacga cgcaccgtgt 900
 gacagcgaga aggacggctg gatctgtgag aaaaggcaca actgctgacc 950
 ccgcccagtg ccctggagcc gcgcccattg cagcatgtcg taccctgggg 1000
 gctgctcacc tcctgggtc ctggagctga ttgccaaaga gtttttttct 1050
 tcctcatcca ccgctgctga gtctcagaaa cacttggccc aacatagccc 1100
 tgtccagccc agtgccctggg ctctgggacc tccatgccga cctcatccta 1150
 actccactca cgcagacca acctaacctc cactagctcc aaaatccctg 1200
 ctctgcgtc ccgctgatat gcctccactt ctctccctaa ccaaggttag 1250
 gtgactgagg actggagctg tttggttttc tcgcattttc caccaaactg 1300
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 aaaaa 1355

<210> 422
 <211> 293
 <212> PRT
 <213> Homo Sapien

<400> 422
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 1 5 10 15
 Val Pro Gly Gly Pro Trp Gly Arg Trp Val His Trp Ser Arg Arg

<212> DNA

<213> Homo Sapien

<400> 423

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ctccccgccg agaagcctcg ctcggcgccc aacatggcgg gtgggcgctg 150
cggccccgcag ctaacggcgc tcctggccgc ctggatcgcg gctgtggcgg 200
cgacggcagg ccccgaggag gccgcgctgc cgccggagca gagccgggtc 250
cagcccatga ccgcctccaa ctggacgctg gtgatggagg gcgagtggat 300
gctgaaattt tacgccccat ggtgtccatc ctgccagcag actgattcag 350
aatgggaggc ttttgcaaag aatggtgaaa tacttcagat cagtgtgggg 400
aaggtagatg tcattcaaga accaggtttg agtggccgct tctttgtcac 450
cactctccca gcattttttc atgcaaagga tgggatattc cgccgttacc 500
gtggcccagg aatcttcgaa gacctgcaga attatatctt agagaagaaa 550
tggcaatcag tcgagcctct gactggctgg aaatccccag cttctctaac 600
gatgtctgga atggctggtc tttttagcat ctctggcaag atatggcatc 650
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gtgttttttcg tcatagccac cttggttttt ggcccttttta tgggtctggt 750
cttggtggta atatcagaat gtttctatgt gccacttcca aggcatttat 800
ctgagcgttc tgagcagaat cggagatcag aggaggctca tagagctgaa 850
cagttgcagg atgcggagga ggaaaaagat gattcaaatg aagaagaaaa 900
caaagacagc cttgtagatg atgaagaaga gaaagaagat cttggcgatg 950
aggatgaagc agaggaagaa gaggaggagg acaacttggc tgctggtgtg 1000
gatgaggaga gaagtgagge caatgatcag gggccccccag gagaggacgg 1050
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<210> 424
 <211> 349
 <212> PRT
 <213> Homo Sapien

<400> 424
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 Ala Leu Pro Pro Glu Gln Ser Arg Val Gln Pro Met Thr Ala Ser
 35 40 45
 Asn Trp Thr Leu Val Met Glu Gly Glu Trp Met Leu Lys Phe Tyr

				50					55					60
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Ala	Phe	Ala	Lys	Asn 80	Gly	Glu	Ile	Leu	Gln 85	Ile	Ser	Val	Gly	Lys 90
Val	Asp	Val	Ile	Gln 95	Glu	Pro	Gly	Leu	Ser 100	Gly	Arg	Phe	Phe	Val 105
Thr	Thr	Leu	Pro	Ala 110	Phe	Phe	His	Ala	Lys 115	Asp	Gly	Ile	Phe	Arg 120
Arg	Tyr	Arg	Gly	Pro 125	Gly	Ile	Phe	Glu	Asp 130	Leu	Gln	Asn	Tyr	Ile 135
Leu	Glu	Lys	Lys	Trp 140	Gln	Ser	Val	Glu	Pro 145	Leu	Thr	Gly	Trp	Lys 150
Ser	Pro	Ala	Ser	Leu 155	Thr	Met	Ser	Gly	Met 160	Ala	Gly	Leu	Phe	Ser 165
Ile	Ser	Gly	Lys	Ile 170	Trp	His	Leu	His	Asn 175	Tyr	Phe	Thr	Val	Thr 180
Leu	Gly	Ile	Pro	Ala 185	Trp	Cys	Ser	Tyr	Val 190	Phe	Phe	Val	Ile	Ala 195
Thr	Leu	Val	Phe	Gly 200	Leu	Phe	Met	Gly	Leu 205	Val	Leu	Val	Val	Ile 210
Ser	Glu	Cys	Phe	Tyr 215	Val	Pro	Leu	Pro	Arg 220	His	Leu	Ser	Glu	Arg 225
Ser	Glu	Gln	Asn	Arg 230	Arg	Ser	Glu	Glu	Ala 235	His	Arg	Ala	Glu	Gln 240
Leu	Gln	Asp	Ala	Glu 245	Glu	Glu	Lys	Asp	Asp 250	Ser	Asn	Glu	Glu	Glu 255
Asn	Lys	Asp	Ser	Leu 260	Val	Asp	Asp	Glu	Glu 265	Glu	Lys	Glu	Asp	Leu 270
Gly	Asp	Glu	Asp	Glu 275	Ala	Glu	Glu	Glu	Glu 280	Glu	Glu	Asp	Asn	Leu 285
Ala	Ala	Gly	Val	Asp 290	Glu	Glu	Arg	Ser	Glu 295	Ala	Asn	Asp	Gln	Gly 300
Pro	Pro	Gly	Glu	Asp 305	Gly	Val	Thr	Arg	Glu 310	Glu	Val	Glu	Pro	Glu 315
Glu	Ala	Glu	Glu	Gly 320	Ile	Ser	Glu	Gln	Pro 325	Cys	Pro	Ala	Asp	Thr 330
Glu	Val	Val	Glu	Asp 335	Ser	Leu	Arg	Gln	Arg 340	Lys	Ser	Gln	His	Ala 345

Asp Lys Gly Leu

<210> 425

<211> 4040

<212> DNA

<213> Homo Sapien

<400> 425

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<210> 426
<211> 747
<212> PRT
<213> Homo Sapien

<400> 426

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				20					25					30
Gly	Thr	Asp	Gln	Asp	Phe	Tyr	Ser	Leu	Leu	Gly	Val	Ser	Lys	Thr
				35					40					45
Ala	Ser	Ser	Arg	Glu	Ile	Arg	Gln	Ala	Phe	Lys	Lys	Leu	Ala	Leu
				50					55					60
Lys	Leu	His	Pro	Asp	Lys	Asn	Pro	Asn	Asn	Pro	Asn	Ala	His	Gly
				65					70					75
Asp	Phe	Leu	Lys	Ile	Asn	Arg	Ala	Tyr	Glu	Val	Leu	Lys	Asp	Glu
				80					85					90
Asp	Leu	Arg	Lys	Lys	Tyr	Asp	Lys	Tyr	Gly	Glu	Lys	Gly	Leu	Glu
				95					100					105
Asp	Asn	Gln	Gly	Gly	Gln	Tyr	Glu	Ser	Trp	Asn	Tyr	Tyr	Arg	Tyr
				110					115					120
Asp	Phe	Gly	Ile	Tyr	Asp	Asp	Asp	Pro	Glu	Ile	Ile	Thr	Leu	Glu
				125					130					135
Arg	Arg	Glu	Phe	Asp	Ala	Ala	Val	Asn	Ser	Gly	Glu	Leu	Trp	Phe
				140					145					150
Val	Asn	Phe	Tyr	Ser	Pro	Gly	Cys	Ser	His	Cys	His	Asp	Leu	Ala
				155					160					165
Pro	Thr	Trp	Arg	Asp	Phe	Ala	Lys	Glu	Val	Asp	Gly	Leu	Leu	Arg
				170					175					180
Ile	Gly	Ala	Val	Asn	Cys	Gly	Asp	Asp	Arg	Met	Leu	Cys	Arg	Met
				185					190					195
Lys	Gly	Val	Asn	Ser	Tyr	Pro	Ser	Leu	Phe	Ile	Phe	Arg	Ser	Gly
				200					205					210
Met	Ala	Pro	Val	Lys	Tyr	His	Gly	Asp	Arg	Ser	Lys	Glu	Ser	Leu
				215					220					225
Val	Ser	Phe	Ala	Met	Gln	His	Val	Arg	Ser	Thr	Val	Thr	Glu	Leu
				230					235					240
Trp	Thr	Gly	Asn	Phe	Val	Asn	Ser	Ile	Gln	Thr	Ala	Phe	Ala	Ala
				245					250					255
Gly	Ile	Gly	Trp	Leu	Ile	Thr	Phe	Cys	Ser	Lys	Gly	Gly	Asp	Cys
				260					265					270
Leu	Thr	Ser	Gln	Thr	Arg	Leu	Arg	Leu	Ser	Gly	Met	Leu	Phe	Leu
				275					280					285

Asn Ser Leu Asp	Ala Lys Glu Ile Tyr	Leu Glu Val Ile His Asn	290	295	300
Leu Pro Asp Phe	Glu Leu Leu Ser Ala	Asn Thr Leu Glu Asp Arg	305	310	315
Leu Ala His His	Arg Trp Leu Leu Phe	Phe His Phe Gly Lys Asn	320	325	330
Glu Asn Ser Asn	Asp Pro Glu Leu Lys	Lys Leu Lys Thr Leu Leu	335	340	345
Lys Asn Asp His	Ile Gln Val Gly Arg	Phe Asp Cys Ser Ser Ala	350	355	360
Pro Asp Ile Cys	Ser Asn Leu Tyr Val	Phe Gln Pro Ser Leu Ala	365	370	375
Val Phe Lys Gly	Gln Gly Thr Lys Glu	Tyr Glu Ile His His Gly	380	385	390
Lys Lys Ile Leu	Tyr Asp Ile Leu Ala	Phe Ala Lys Glu Ser Val	395	400	405
Asn Ser His Val	Thr Thr Leu Gly Pro	Gln Asn Phe Pro Ala Asn	410	415	420
Asp Lys Glu Pro	Trp Leu Val Asp Phe	Phe Ala Pro Trp Cys Pro	425	430	435
Pro Cys Arg Ala	Leu Leu Pro Glu Leu	Arg Arg Ala Ser Asn Leu	440	445	450
Leu Tyr Gly Gln	Leu Lys Phe Gly Thr	Leu Asp Cys Thr Val His	455	460	465
Glu Gly Leu Cys	Asn Met Tyr Asn Ile	Gln Ala Tyr Pro Thr Thr	470	475	480
Val Val Phe Asn	Gln Ser Asn Ile His	Glu Tyr Glu Gly His His	485	490	495
Ser Ala Glu Gln	Ile Leu Glu Phe Ile	Glu Asp Leu Met Asn Pro	500	505	510
Ser Val Val Ser	Leu Thr Pro Thr Thr	Phe Asn Glu Leu Val Thr	515	520	525
Gln Arg Lys His	Asn Glu Val Trp Met	Val Asp Phe Tyr Ser Pro	530	535	540
Trp Cys His Pro	Cys Gln Val Leu Met	Pro Glu Trp Lys Arg Met	545	550	555
Ala Arg Thr Leu	Thr Gly Leu Ile Asn	Val Gly Ser Ile Asp Cys	560	565	570
Gln Gln Tyr His	Ser Phe Cys Ala Gln	Glu Asn Val Gln Arg Tyr			

Pro	Pro	Pro	Leu	Gly	Gly	Ala	Ala	Gly	His	Pro	Gly	Ser	Ala	Val	50	55	60
Ser	Ala	Ala	Pro	Gly	Ile	Leu	Tyr	Pro	Gly	Gly	Asn	Lys	Tyr	Gln	65	70	75
Thr	Ile	Asp	Asn	Tyr	Gln	Pro	Tyr	Pro	Cys	Ala	Glu	Asp	Glu	Glu	80	85	90
Cys	Gly	Thr	Asp	Glu	Tyr	Cys	Ala	Ser	Pro	Thr	Arg	Gly	Gly	Asp	95	100	105
Ala	Gly	Val	Gln	Ile	Cys	Leu	Ala	Cys	Arg	Lys	Arg	Arg	Lys	Arg	110	115	120
Cys	Met	Arg	His	Ala	Met	Cys	Cys	Pro	Gly	Asn	Tyr	Cys	Lys	Asn	125	130	135
Gly	Ile	Cys	Val	Ser	Ser	Asp	Gln	Asn	His	Phe	Arg	Gly	Glu	Ile	140	145	150
Glu	Glu	Thr	Ile	Thr	Glu	Ser	Phe	Gly	Asn	Asp	His	Ser	Thr	Leu	155	160	165
Asp	Gly	Tyr	Ser	Arg	Arg	Thr	Thr	Leu	Ser	Ser	Lys	Met	Tyr	His	170	175	180
Thr	Lys	Gly	Gln	Glu	Gly	Ser	Val	Cys	Leu	Arg	Ser	Ser	Asp	Cys	185	190	195
Ala	Ser	Gly	Leu	Cys	Cys	Ala	Arg	His	Phe	Trp	Ser	Lys	Ile	Cys	200	205	210
Lys	Pro	Val	Leu	Lys	Glu	Gly	Gln	Val	Cys	Thr	Lys	His	Arg	Arg	215	220	225
Lys	Gly	Ser	His	Gly	Leu	Glu	Ile	Phe	Gln	Arg	Cys	Tyr	Cys	Gly	230	235	240
Glu	Gly	Leu	Ser	Cys	Arg	Ile	Gln	Lys	Asp	His	His	Gln	Ala	Ser	245	250	255
Asn	Ser	Ser	Arg	Leu	His	Thr	Cys	Gln	Arg	His					260	265	

<210> 429
 <211> 1523
 <212> DNA
 <213> Homo Sapien

<400> 429
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<400> 430

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Leu	Leu	Leu	Leu	Val	Thr	Trp	Val	Phe	Thr	Pro	Val	Thr	Thr	Glu	
				20					25					30	
Ile	Thr	Ser	Leu	Ala	Thr	Glu	Asn	Ile	Asp	Glu	Ile	Leu	Asn	Asn	
				35					40					45	
Ala	Asp	Val	Ala	Leu	Val	Asn	Phe	Tyr	Ala	Asp	Trp	Cys	Arg	Phe	
				50					55					60	
Ser	Gln	Met	Leu	His	Pro	Ile	Phe	Glu	Glu	Ala	Ser	Asp	Val	Ile	
				65					70					75	
Lys	Glu	Glu	Phe	Pro	Asn	Glu	Asn	Gln	Val	Val	Phe	Ala	Arg	Val	
				80					85					90	
Asp	Cys	Asp	Gln	His	Ser	Asp	Ile	Ala	Gln	Arg	Tyr	Arg	Ile	Ser	
				95					100					105	
Lys	Tyr	Pro	Thr	Leu	Lys	Leu	Phe	Arg	Asn	Gly	Met	Met	Met	Lys	
				110					115					120	
Arg	Glu	Tyr	Arg	Gly	Gln	Arg	Ser	Val	Lys	Ala	Leu	Ala	Asp	Tyr	
				125					130					135	
Ile	Arg	Gln	Gln	Lys	Ser	Asp	Pro	Ile	Gln	Glu	Ile	Arg	Asp	Leu	
				140					145					150	
Ala	Glu	Ile	Thr	Thr	Leu	Asp	Arg	Ser	Lys	Arg	Asn	Ile	Ile	Gly	
				155					160					165	
Tyr	Phe	Glu	Gln	Lys	Asp	Ser	Asp	Asn	Tyr	Arg	Val	Phe	Glu	Arg	
				170					175					180	
Val	Ala	Asn	Ile	Leu	His	Asp	Asp	Cys	Ala	Phe	Leu	Ser	Ala	Phe	
				185					190					195	
Gly	Asp	Val	Ser	Lys	Pro	Glu	Arg	Tyr	Ser	Gly	Asp	Asn	Ile	Ile	
				200					205					210	
Tyr	Lys	Pro	Pro	Gly	His	Ser	Ala	Pro	Asp	Met	Val	Tyr	Leu	Gly	
				215					220					225	
Ala	Met	Thr	Asn	Phe	Asp	Val	Thr	Tyr	Asn	Trp	Ile	Gln	Asp	Lys	
				230					235					240	
Cys	Val	Pro	Leu	Val	Arg	Glu	Ile	Thr	Phe	Glu	Asn	Gly	Glu	Glu	
				245					250					255	
Leu	Thr	Glu	Glu	Gly	Leu	Pro	Phe	Leu	Ile	Leu	Phe	His	Met	Lys	
				260					265					270	
Glu	Asp	Thr	Glu	Ser	Leu	Glu	Ile	Phe	Gln	Asn	Glu	Val	Ala	Arg	
				275					280					285	

Gln	Leu	Ile	Ser	Glu	Lys	Gly	Thr	Ile	Asn	Phe	Leu	His	Ala	Asp
				290					295					300
Cys	Asp	Lys	Phe	Arg	His	Pro	Leu	Leu	His	Ile	Gln	Lys	Thr	Pro
				305					310					315
Ala	Asp	Cys	Pro	Val	Ile	Ala	Ile	Asp	Ser	Phe	Arg	His	Met	Tyr
				320					325					330
Val	Phe	Gly	Asp	Phe	Lys	Asp	Val	Leu	Ile	Pro	Gly	Lys	Leu	Lys
				335					340					345
Gln	Phe	Val	Phe	Asp	Leu	His	Ser	Gly	Lys	Leu	His	Arg	Glu	Phe
				350					355					360
His	His	Gly	Pro	Asp	Pro	Thr	Asp	Thr	Ala	Pro	Gly	Glu	Gln	Ala
				365					370					375
Gln	Asp	Val	Ala	Ser	Ser	Pro	Pro	Glu	Ser	Ser	Phe	Gln	Lys	Leu
				380					385					390
Ala	Pro	Ser	Glu	Tyr	Arg	Tyr	Thr	Leu	Leu	Arg	Asp	Arg	Asp	Glu
				395					400					405

Leu

<210> 431
 <211> 1575
 <212> DNA
 <213> Homo Sapien

<400> 431
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 aggccctgga gtgctacagc tgcgtgcaga aagcagatga cggatgctcc 150
 ccgaacaaga tgaagacagt gaagtgcgcg ccgggcgtgg acgtctgcac 200
 cgaggccgtg ggggcggtgg agaccatcca cggacaattc tcgctggcag 250
 tgcgggggtg cggttcggga ctccccggca agaatgaccg cggcctggat 300
 cttcacgggc ttctggcggt catccagctg cagcaatgcg ctcaggatcg 350
 ctgcaacgcc aagctcaacc tcacctcgcg ggcgctcgac ccggcaggta 400
 atgagagtgc ataccgccc aacggcgtgg agtgctacag ctgtgtgggc 450
 ctgagccggg aggcgtgcca gggtagatcg ccgccggtcg tgagctgcta 500
 caacgccagc gatcatgtct acaagggctg cttcgacggc aacgtcacct 550
 tgacggcagc taatgtgact gtgtccttgc ctgtccgggg ctgtgtccag 600
 gatgaattct gcactcggga tggagtaaca ggcccagggt tcacgctcag 650

<211> 1657
<212> DNA
<213> Homo Sapien

<400> 433

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acgccatgga gttggtgctg gtcttcctct gcagcctgct ggcccccatg 100
gtcctggcca gtgcagctga aaaggagaag gaaatggacc cttttcatta 150
tgattaccag accctgagga ttgggggact ggtgttcgct gtggtcctct 200
tctcggttgg gatcctcctt atcctaagtc gcagggtgcaa gtgcagtttc 250
aatcagaagc cccgggcccc aggagatgag gaagcccagg tggagaacct 300
catcacccgc aatgcaacag agccccagaa gcagagaact gaagtgcagc 350
catcaggtgg aagcctctgg aacctgaggc ggctgcttga acctttggat 400
gcaaatgtcg atgcttaaga aaaccggcca cttcagcaac agccctttcc 450
ccaggagaag ccaagaactt gtgtgtcccc caccctatcc cctctaacac 500
cattcctcca cctgatgatg caactaacac ttgcctcccc actgcagcct 550
gcggtcctgc ccacctcccg tgatgtgtgt gtgtgtgtgt gtgtgtgact 600
gtgtgtgttt gctaactgtg gtctttgtgg ctacttgttt gtggatggta 650
ttgtgtttgt tagtgaactg tggactcgct ttcccaggca ggggctgagc 700
cacatggcca tctgctcctc cctgcccccg tggccctcca tcaccttctg 750
ctcctaggag gctgcttggt gcccgagacc agccccctcc cctgatttag 800
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cctttaacaa aaaccttgct tccttatccc acctgatccc agtctgaagg 950
tctcttagca actggagata caaagcaagg agctggtgag cccagcgttg 1000
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cacgaggagt ccccatctgc cccgcccctt cacagagcgc ccggggattc 1100
caggcccagg gcttctactc tgcccctggg gaatgtgtcc cctgcatatc 1150
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cctgcttctg agacttcaat ctacagccca gctcatccag atgcagacta 1250
cagtccttgc aattgggtct ctggcaggca atagttgaag gactcctggt 1300
ccgttggggc cagcacaccg ggatggatgg agggagagca gaggcctttg 1350

cttctctgcc tacgtcccct tagatgggca gcagaggcaa ctcccgcac 1400
ctttgctctg cctgtcggtg gtcagagcgg tgagcgaggt gggttggaga 1450
ctcagcaggc tccgtgcagc ccttgggaaac agtgagaggt tgaaggtcat 1500
aacgagagtg ggaactcaac ccagatccccg cccctcctgt cctctgtgtt 1550
cccgcggaaa ccaaccaaac cgtgcgctgt gacccattgc tgttctctgt 1600
atcgtgatct atcctcaaca acaacagaaa aaaggaataa aatatccttt 1650
gtttcct 1657

<210> 434
<211> 120
<212> PRT
<213> Homo Sapien

<400> 434
Met Glu Leu Val Leu Val Phe Leu Cys Ser Leu Leu Ala Pro Met
1 5 10 15
Val Leu Ala Ser Ala Ala Glu Lys Glu Lys Glu Met Asp Pro Phe
20 25 30
His Tyr Asp Tyr Gln Thr Leu Arg Ile Gly Gly Leu Val Phe Ala
35 40 45
Val Val Leu Phe Ser Val Gly Ile Leu Leu Ile Leu Ser Arg Arg
50 55 60
Cys Lys Cys Ser Phe Asn Gln Lys Pro Arg Ala Pro Gly Asp Glu
65 70 75
Glu Ala Gln Val Glu Asn Leu Ile Thr Ala Asn Ala Thr Glu Pro
80 85 90
Gln Lys Gln Arg Thr Glu Val Gln Pro Ser Gly Gly Ser Leu Trp
95 100 105
Asn Leu Arg Arg Leu Leu Glu Pro Leu Asp Ala Asn Val Asp Ala
110 115 120

<210> 435
<211> 1297
<212> DNA
<213> Homo Sapien

<400> 435
ggtccttaat ggcagcagcc gccgctacca agatccttct gtgcctcccg 50
cttctgctcc tgctgtccgg ctgggtcccg gctgggagc cgcacctca 100
ctctctttgc tatgacatca ccgtcatccc taagtccaga cctggaccac 150
ggtaggtgtgc ggttcaaggc caggtggatg aaaagacttt tcttcactat 200

gactgtggca acaagacagt cacacctgtc agtcccctgg ggaagaaact 250
aatgtcaca acggcctgga aagcacagaa cccagtactg agagaggtgg 300
tggacatact tacagagcaa ctgctgtgaca ttcagctgga gaattacaca 350
cccaaggaac ccctcacctt gcaggcaagg atgtcttgtg agcagaaagc 400
tgaaggacac agcagtggat cttggcagtt cagtttcgat gggcagatct 450
tcctcctctt tgactcagag aagagaatgt ggacaacggt tcctcctgga 500
gccagaaaga tgaaagaaaa gtgggagaat gacaagggtg tggccatgtc 550
cttccattac ttctcaatgg gagactgtat aggatggctt gaggacttct 600
tgatgggcat ggacagcacc ctggagccaa gtgcaggagc accactcgcc 650
atgtcctcag gcacaacca actcagggcc acagccacca ccctcatcct 700
ttgctgcctc ctcatcatcc tcccctgctt catcctcctt ggcactctgag 750
gagagtcctt tagagtgaca ggttaaagct gataccaaaa ggctcctgtg 800
agcacggtct tgatcaaact cgccttctg tctggccagc tgcccacgac 850
ctacggtgta tgtccagtgg cctccagcag atcatgatga catcatggac 900
ccaatagctc attcactgcc ttgattcctt ttgccaacaa ttttaccagc 950
agttatacct aacatattat gcaattttct cttggtgcta cctgatggaa 1000
ttcctgcact taaagttctg gctgactaaa caagatatat cattttcttt 1050
cttctctttt tgtttggaaa atcaagtact tctttgaatg atgatctctt 1100
tcttgcaaat gatattgtca gtaaaataat cacgtagac ttcagacctc 1150
tggggattct ttccgtgtcc tgaaagagaa tttttaaat atttaataag 1200
aaaaaattta tattaatgat tgtttccttt agtaatttat tgttctgtac 1250
tgatatttaa ataaagagtt ctatttccca aaaaaaaaaa aaaaaaa 1297

<210> 436
<211> 246
<212> PRT
<213> Homo Sapien

<400> 436
Met Ala Ala Ala Ala Thr Lys Ile Leu Leu Cys Leu Pro Leu
1 5 10 15
Leu Leu Leu Leu Ser Gly Trp Ser Arg Ala Gly Arg Ala Asp Pro
20 25 30
His Ser Leu Cys Tyr Asp Ile Thr Val Ile Pro Lys Phe Arg Pro
35 40 45

Gly	Pro	Arg	Trp	Cys	Ala	Val	Gln	Gly	Gln	Val	Asp	Glu	Lys	Thr	
				50					55					60	
Phe	Leu	His	Tyr	Asp	Cys	Gly	Asn	Lys	Thr	Val	Thr	Pro	Val	Ser	
				65					70					75	
Pro	Leu	Gly	Lys	Lys	Leu	Asn	Val	Thr	Thr	Ala	Trp	Lys	Ala	Gln	
				80					85					90	
Asn	Pro	Val	Leu	Arg	Glu	Val	Val	Asp	Ile	Leu	Thr	Glu	Gln	Leu	
				95					100					105	
Arg	Asp	Ile	Gln	Leu	Glu	Asn	Tyr	Thr	Pro	Lys	Glu	Pro	Leu	Thr	
				110					115					120	
Leu	Gln	Ala	Arg	Met	Ser	Cys	Glu	Gln	Lys	Ala	Glu	Gly	His	Ser	
				125					130					135	
Ser	Gly	Ser	Trp	Gln	Phe	Ser	Phe	Asp	Gly	Gln	Ile	Phe	Leu	Leu	
				140					145					150	
Phe	Asp	Ser	Glu	Lys	Arg	Met	Trp	Thr	Thr	Val	His	Pro	Gly	Ala	
				155					160					165	
Arg	Lys	Met	Lys	Glu	Lys	Trp	Glu	Asn	Asp	Lys	Val	Val	Ala	Met	
				170					175					180	
Ser	Phe	His	Tyr	Phe	Ser	Met	Gly	Asp	Cys	Ile	Gly	Trp	Leu	Glu	
				185					190					195	
Asp	Phe	Leu	Met	Gly	Met	Asp	Ser	Thr	Leu	Glu	Pro	Ser	Ala	Gly	
				200					205					210	
Ala	Pro	Leu	Ala	Met	Ser	Ser	Gly	Thr	Thr	Gln	Leu	Arg	Ala	Thr	
				215					220					225	
Ala	Thr	Thr	Leu	Ile	Leu	Cys	Cys	Leu	Leu	Ile	Ile	Leu	Pro	Cys	
				230					235					240	
Phe	Ile	Leu	Pro	Gly	Ile										
				245											

<210> 437

<211> 2185

<212> DNA

<213> Homo Sapien

<400> 437

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gtgcagccat cgctgctgcc gcctcagccg ggccccagaa ctgcccctcc 200

gtttgctcgt gcagtaacca gttcagcaag gtggtgtgca cgcgccgggg 250

cctctccgag gtcccgcagg gtattccctc gaacacccgg tacctcaacc 300
tcatggagaa caacatccag atgatccagg ccgacacctt ccgccacctc 350
caccacctgg aggtcctgca gttgggcagg aactccatcc ggcagattga 400
ggtggggggc ttcaacggcc tggccagcct caacaccctg gagctgttcg 450
acaactggct gacagtcac cctagcgggg cctttgaata cctgtccaag 500
ctgcgggagc tctggcttcg caacaacccc atcgaaagca tcccctctta 550
cgccttcaac cgggtgcctt ccctcatgcg cctggacttg ggggagctca 600
agaagctgga gtatatctct gagggagctt ttgaggggct gttcaacctc 650
aagtatctga acttgggcat gtgcaacatt aaagacatgc ccaatctcac 700
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agatcaggcc tggctccttc catggcctga gctccctcaa gaagctctgg 800
gtcatgaact cacaggtcag cctgattgag cggaatgctt ttgacgggct 850
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cccatgacct ctttaccctg ctgaggtacc tgggtggagt gcatctacac 950
cacaaccctt ggaactgtga ttgtgacatt ctgtggctag cctgggtggct 1000
tcgagagtat ataccacca attccacctg ctgtggccgc tgtcatgctc 1050
ccatgcacat gcgaggccgc tacctcgtgg aggtggacca ggcctccttc 1100
cagtgtcttg ccccttcat catggacgca cctcgagacc tcaacatttc 1150
tgagggtcgg atggcagaac ttaagtgtcg gactccccct atgtcctccg 1200
tgaagtgggt gctgcccaat gggacagtgc tcagccacgc ctcccgcac 1250
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 cagcaacagc agctccgtcc ggtgtatcag gtgagggggc agtagtgctg 1850
 cccacaattc atgaccatat taactacaac acctacaaac cagcacatgg 1900
 ggcccactgg acagaaaaca gcctgggggaa ctctctgcac cccacagtca 1950
 ccactatctc tgaaccttat ataattcaga cccataccaa ggacaaggta 2000
 caggaaactc aaatatgact cccctcccc aaaaaactta taaaatgcaa 2050
 tagaatgcac acaaagacag caacttttgt acagagtggg gagagacttt 2100
 ttcttgtata tgcttatata ttaagtctat gggctgggta aaaaaaacag 2150
 attatattaa aatttaaaga caaaaagtca aaaca 2185

<210> 438

<211> 653

<212> PRT

<213> Homo Sapien

<400> 438

Met	Lys	Leu	Leu	Trp	Gln	Val	Thr	Val	His	His	His	Thr	Trp	Asn
1				5					10					15
Ala	Ile	Leu	Leu	Pro	Phe	Val	Tyr	Leu	Thr	Ala	Gln	Val	Trp	Ile
				20					25					30
Leu	Cys	Ala	Ala	Ile	Ala	Ala	Ala	Ala	Ser	Ala	Gly	Pro	Gln	Asn
				35					40					45
Cys	Pro	Ser	Val	Cys	Ser	Cys	Ser	Asn	Gln	Phe	Ser	Lys	Val	Val
				50					55					60
Cys	Thr	Arg	Arg	Gly	Leu	Ser	Glu	Val	Pro	Gln	Gly	Ile	Pro	Ser
				65					70					75
Asn	Thr	Arg	Tyr	Leu	Asn	Leu	Met	Glu	Asn	Asn	Ile	Gln	Met	Ile
				80					85					90
Gln	Ala	Asp	Thr	Phe	Arg	His	Leu	His	His	Leu	Glu	Val	Leu	Gln
				95					100					105
Leu	Gly	Arg	Asn	Ser	Ile	Arg	Gln	Ile	Glu	Val	Gly	Ala	Phe	Asn
				110					115					120
Gly	Leu	Ala	Ser	Leu	Asn	Thr	Leu	Glu	Leu	Phe	Asp	Asn	Trp	Leu
				125					130					135
Thr	Val	Ile	Pro	Ser	Gly	Ala	Phe	Glu	Tyr	Leu	Ser	Lys	Leu	Arg
				140					145					150
Glu	Leu	Trp	Leu	Arg	Asn	Asn	Pro	Ile	Glu	Ser	Ile	Pro	Ser	Tyr
				155					160					165

Ala	Phe	Asn	Arg	Val	Pro	Ser	Leu	Met	Arg	Leu	Asp	Leu	Gly	Glu	
				170					175					180	
Leu	Lys	Lys	Leu	Glu	Tyr	Ile	Ser	Glu	Gly	Ala	Phe	Glu	Gly	Leu	
				185					190					195	
Phe	Asn	Leu	Lys	Tyr	Leu	Asn	Leu	Gly	Met	Cys	Asn	Ile	Lys	Asp	
				200					205					210	
Met	Pro	Asn	Leu	Thr	Pro	Leu	Val	Gly	Leu	Glu	Glu	Leu	Glu	Met	
				215					220					225	
Ser	Gly	Asn	His	Phe	Pro	Glu	Ile	Arg	Pro	Gly	Ser	Phe	His	Gly	
				230					235					240	
Leu	Ser	Ser	Leu	Lys	Lys	Leu	Trp	Val	Met	Asn	Ser	Gln	Val	Ser	
				245					250					255	
Leu	Ile	Glu	Arg	Asn	Ala	Phe	Asp	Gly	Leu	Ala	Ser	Leu	Val	Glu	
				260					265					270	
Leu	Asn	Leu	Ala	His	Asn	Asn	Leu	Ser	Ser	Leu	Pro	His	Asp	Leu	
				275					280					285	
Phe	Thr	Pro	Leu	Arg	Tyr	Leu	Val	Glu	Leu	His	Leu	His	His	Asn	
				290					295					300	
Pro	Trp	Asn	Cys	Asp	Cys	Asp	Ile	Leu	Trp	Leu	Ala	Trp	Trp	Leu	
				305					310					315	
Arg	Glu	Tyr	Ile	Pro	Thr	Asn	Ser	Thr	Cys	Cys	Gly	Arg	Cys	His	
				320					325					330	
Ala	Pro	Met	His	Met	Arg	Gly	Arg	Tyr	Leu	Val	Glu	Val	Asp	Gln	
				335					340					345	
Ala	Ser	Phe	Gln	Cys	Ser	Ala	Pro	Phe	Ile	Met	Asp	Ala	Pro	Arg	
				350					355					360	
Asp	Leu	Asn	Ile	Ser	Glu	Gly	Arg	Met	Ala	Glu	Leu	Lys	Cys	Arg	
				365					370					375	
Thr	Pro	Pro	Met	Ser	Ser	Val	Lys	Trp	Leu	Leu	Pro	Asn	Gly	Thr	
				380					385					390	
Val	Leu	Ser	His	Ala	Ser	Arg	His	Pro	Arg	Ile	Ser	Val	Leu	Asn	
				395					400					405	
Asp	Gly	Thr	Leu	Asn	Phe	Ser	His	Val	Leu	Leu	Ser	Asp	Thr	Gly	
				410					415					420	
Val	Tyr	Thr	Cys	Met	Val	Thr	Asn	Val	Ala	Gly	Asn	Ser	Asn	Ala	
				425					430					435	
Ser	Ala	Tyr	Leu	Asn	Val	Ser	Thr	Ala	Glu	Leu	Asn	Thr	Ser	Asn	
				440					445					450	
Tyr	Ser	Phe	Phe	Thr	Thr	Val	Thr	Val	Glu	Thr	Thr	Glu	Ile	Ser	

				455						460					465
Pro	Glu	Asp	Thr	Thr	Arg	Lys	Tyr	Lys	Pro	Val	Pro	Thr	Thr	Ser	
				470					475					480	
Thr	Gly	Tyr	Gln	Pro	Ala	Tyr	Thr	Thr	Ser	Thr	Thr	Val	Leu	Ile	
				485					490					495	
Gln	Thr	Thr	Arg	Val	Pro	Lys	Gln	Val	Ala	Val	Pro	Ala	Thr	Asp	
				500					505					510	
Thr	Thr	Asp	Lys	Met	Gln	Thr	Ser	Leu	Asp	Glu	Val	Met	Lys	Thr	
				515					520					525	
Thr	Lys	Ile	Ile	Ile	Gly	Cys	Phe	Val	Ala	Val	Thr	Leu	Leu	Ala	
				530					535					540	
Ala	Ala	Met	Leu	Ile	Val	Phe	Tyr	Lys	Leu	Arg	Lys	Arg	His	Gln	
				545					550					555	
Gln	Arg	Ser	Thr	Val	Thr	Ala	Ala	Arg	Thr	Val	Glu	Ile	Ile	Gln	
				560					565					570	
Val	Asp	Glu	Asp	Ile	Pro	Ala	Ala	Thr	Ser	Ala	Ala	Ala	Thr	Ala	
				575					580					585	
Ala	Pro	Ser	Gly	Val	Ser	Gly	Glu	Gly	Ala	Val	Val	Leu	Pro	Thr	
				590					595					600	
Ile	His	Asp	His	Ile	Asn	Tyr	Asn	Thr	Tyr	Lys	Pro	Ala	His	Gly	
				605					610					615	
Ala	His	Trp	Thr	Glu	Asn	Ser	Leu	Gly	Asn	Ser	Leu	His	Pro	Thr	
				620					625					630	
Val	Thr	Thr	Ile	Ser	Glu	Pro	Tyr	Ile	Ile	Gln	Thr	His	Thr	Lys	
				635					640					645	
Asp	Lys	Val	Gln	Glu	Thr	Gln	Ile								
				650											

<210> 439
 <211> 434
 <212> DNA
 <213> Homo Sapien

<400> 439
 gtcgaatcca aatcactcat tgtgaaagct gagctcacag ccgaataagc 50
 caccatgagg ctgtcagtgt gtctcctgat ggtctcgctg gccctttgct 100
 gctaccaggc ccatgctctt gtctgcccag ctgttgcttc tgagatcaca 150
 gtctttcttat tcttaagtga cgctgcggta aacctccaag ttgccaaact 200
 taatccacct ccagaagctc ttgcagccaa gttggaagtg aagcactgca 250
 ccgatcagat atcttttaag aaacgactct cattgaaaaa gtccctggtgg 300

aaatagtga aaaaatgtggt gtgtgacatg taaaaatgct caacctgggt 350
 tccaaagtct ttcaacgaca ccctgatctt cactaaaaat tgtaaagggt 400
 tcaacacggt gctttaataa atcacttgcc ctgc 434

<210> 440
 <211> 83
 <212> PRT
 <213> Homo Sapien

<400> 440
 Met Arg Leu Ser Val Cys Leu Leu Met Val Ser Leu Ala Leu Cys
 1 5 10 15
 Cys Tyr Gln Ala His Ala Leu Val Cys Pro Ala Val Ala Ser Glu
 20 25 30
 Ile Thr Val Phe Leu Phe Leu Ser Asp Ala Ala Val Asn Leu Gln
 35 40 45
 Val Ala Lys Leu Asn Pro Pro Pro Glu Ala Leu Ala Ala Lys Leu
 50 55 60
 Glu Val Lys His Cys Thr Asp Gln Ile Ser Phe Lys Lys Arg Leu
 65 70 75
 Ser Leu Lys Lys Ser Trp Trp Lys
 80

<210> 441
 <211> 654
 <212> DNA
 <213> Homo Sapien

<400> 441
 gaacattttt agttcccaag gaatgtacat cagccccacg gaagctaggc 50
 cacctctggg atgggggtgc tggtttaaaa caaacgccag tcctcctata 100
 taaggacctg acagccacca ggcaccacct ccgccaggaa ctgcaggccc 150
 acctgtctgc aaccagctg aggccatgcc ctccccaggg accgtctgca 200
 gcctcctgct cctcggcatg ctctggctgg acttggccat ggcaggctcc 250
 agcttcctga gccctgaaca ccagagagtc cagcagagaa aggagtcgaa 300
 gaagccacca gccaagctgc agccccgagc tctagcaggc tggctccgcc 350
 cggaagatgg aggtcaagca gaaggggagc aggatgaact ggaagtccgg 400
 ttcaacgccc cctttgatgt tggaatcaag ctgtcagggg ttcagtacca 450
 gcagcacagc caggccctgg ggaagtttct tcaggacatc ctctgggaag 500
 aggccaaaga ggccccagcc gacaagtgat cgcccacaag ccttactcac 550

ctctctctaa gtttagaagc gctcatctgg cttttcgctt gcttctgcag 600
 caactcccac gactgttgta caagctcagg aggccaataa atgttcaaac 650
 tgta 654

<210> 442
 <211> 117
 <212> PRT
 <213> Homo Sapien

<400> 442
 Met Pro Ser Pro Gly Thr Val Cys Ser Leu Leu Leu Leu Gly Met
 1 5 10 15
 Leu Trp Leu Asp Leu Ala Met Ala Gly Ser Ser Phe Leu Ser Pro
 20 25 30
 Glu His Gln Arg Val Gln Gln Arg Lys Glu Ser Lys Lys Pro Pro
 35 40 45
 Ala Lys Leu Gln Pro Arg Ala Leu Ala Gly Trp Leu Arg Pro Glu
 50 55 60
 Asp Gly Gly Gln Ala Glu Gly Ala Glu Asp Glu Leu Glu Val Arg
 65 70 75
 Phe Asn Ala Pro Phe Asp Val Gly Ile Lys Leu Ser Gly Val Gln
 80 85 90
 Tyr Gln Gln His Ser Gln Ala Leu Gly Lys Phe Leu Gln Asp Ile
 95 100 105
 Leu Trp Glu Glu Ala Lys Glu Ala Pro Ala Asp Lys
 110 115

<210> 443
 <211> 1332
 <212> DNA
 <213> Homo Sapien

<400> 443
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 gtccagtacc tcgtgaaccc cggggtgctc cgcacggacc ccagatgtca 100
 agaatatgaa cacgtggctg ctgttcctcc ccctgttccc ggtgcaggtg 150
 cagaccctga tagtcgtgat catcgggatg ctctgtctcc tgctggactt 200
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 gctgctcatc ttacacctct acttgagtat gtccctaacc ctgagcccc 350
 cagcctggg gccagagtct ttgtcccccg tgtgcgcatg tgttcagggt 400

cagcctctcc cagaagtgag atcatggaca aaaagggcaa atcacaggaa 450
gaaattaaat ccatgaggac ccagcaggcc cagcaagaag ctgaactcac 500
gccgagacct gcaggagtgg tgccagggtgc ttgaagtaac aagtttaaaa 550
tgttcagaga caatggaatg gaatctatta ggcaagaaca ggacattatg 600
aaataaggac aggtggactt ccaaaaacac aagtagaaat tctaacaatg 650
aaatatatta caggcaggtc acccactaac caaacaactg aagcgagagc 700
tgtggtcttg cttggtctca cagtgggcac agcggtaggc ggtcagtcac 750
gttgctgaac gacggagggt aaactcccca gcccgaagaa aacctgtgtt 800
ggaagtaaca acaacctccc tgctcctggc accagccgtt ttggtcatgg 850
tgggccagct gcaaagcgtc ttccattctc tgggcagtgg tggccccgag 900
gctgtggcct ctcagggggg ttctgtggac acgggcagca gagtgtgtcc 950
aggccagccc ccaagaatgc cctgctcctg acagcttggc caacccttg 1000
tcagggcaga gggagttggg tgggtcaggc tctgggctca cctccatctc 1050
cagagcatcc cctgcctgca gttgtggcaa gaacgcccag ctcagaatga 1100
acacacccca ccaagagcct ccttgttcat aaccacaggt taccctacaa 1150
accactgtcc ccacacaacc ctgggggatgt tttaaaacac acacctctaa 1200
cgcatatctt acagtcactg ttgtcttgcc tgagggttga atttttttta 1250
atgaaagtgc aatgaaaatc actggattaa atcctacgga cacagagctg 1300
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa 1332

<210> 444
<211> 142
<212> PRT
<213> Homo Sapien

<400> 444
Met Asn Thr Trp Leu Leu Phe Leu Pro Leu Phe Pro Val Gln Val
1 5 10 15
Gln Thr Leu Ile Val Val Ile Ile Gly Met Leu Val Leu Leu Leu
20 25 30
Asp Phe Leu Gly Leu Val His Leu Gly Gln Leu Leu Ile Phe His
35 40 45
Ile Tyr Leu Ser Met Ser Pro Thr Leu Ser Pro Arg Ser Pro Gln
50 55 60
Gly Trp Val Val Arg Ala Ala His Leu Thr Pro Leu Leu Glu Tyr
65 70 75

Val	Pro	Asn	Pro	Glu	Pro	Pro	Thr	Pro	Gly	Ala	Arg	Val	Phe	Val
				80					85					90
Pro	Arg	Val	Arg	Met	Cys	Ser	Gly	Ser	Ala	Ser	Pro	Arg	Ser	Glu
				95					100					105
Ile	Met	Asp	Lys	Lys	Gly	Lys	Ser	Gln	Glu	Glu	Ile	Lys	Ser	Met
				110					115					120
Arg	Thr	Gln	Gln	Ala	Gln	Gln	Glu	Ala	Glu	Leu	Thr	Pro	Arg	Pro
				125					130					135
Ala	Gly	Val	Val	Pro	Gly	Ala								
				140										

<210> 445
 <211> 687
 <212> DNA
 <213> Homo Sapien

<400> 445
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 cctcacaacc tgctgtttct tcttaccatt tccatcttcc tggggctggg 100
 ccagcccagg agccccaaaa gcaagaggaa ggggcaaggg cggcctgggc 150
 ccctggcccc tggccctcac caggtgccac tggacctggt gtcacggatg 200
 aaaccgtatg cccgcatgga ggagtatgag aggaacatcg aggagatggt 250
 ggcccagctg aggaacagct cagagctggc ccagagaaag tgtgaggtca 300
 acttgcagct gtggatgtcc aacaagagga gcctgtctcc ctggggctac 350
 agcatcaacc acgaccccag ccgtatcccc gtggacctgc cggaggcacg 400
 gtgcctgtgt ctgggctgtg tgaaccctt caccatgcag gaggaccgca 450
 gcatggtgag cgtgccggtg ttcagccagg ttctgtgcg ccgccgcctc 500
 tgcccggcac cgccccgcac agggccttgc cgccagcgcg cagtcatgga 550
 gaccatcgct gtgggctgca cctgcatctt ctgaatcacc tggcccagaa 600
 gccaggccag cagcccagaa ccatactcct tgcacctttg tgccaagaaa 650
 ggcctatgaa aagtaaacac tgacttttga aagcaag 687

<210> 446
 <211> 180
 <212> PRT
 <213> Homo Sapien

<400> 446
 Met Asp Trp Pro His Asn Leu Leu Phe Leu Leu Thr Ile Ser Ile
 1 5 10 15

Phe	Leu	Gly	Leu	Gly	Gln	Pro	Arg	Ser	Pro	Lys	Ser	Lys	Arg	Lys	20	25	30
Gly	Gln	Gly	Arg	Pro	Gly	Pro	Leu	Ala	Pro	Gly	Pro	His	Gln	Val	35	40	45
Pro	Leu	Asp	Leu	Val	Ser	Arg	Met	Lys	Pro	Tyr	Ala	Arg	Met	Glu	50	55	60
Glu	Tyr	Glu	Arg	Asn	Ile	Glu	Glu	Met	Val	Ala	Gln	Leu	Arg	Asn	65	70	75
Ser	Ser	Glu	Leu	Ala	Gln	Arg	Lys	Cys	Glu	Val	Asn	Leu	Gln	Leu	80	85	90
Trp	Met	Ser	Asn	Lys	Arg	Ser	Leu	Ser	Pro	Trp	Gly	Tyr	Ser	Ile	95	100	105
Asn	His	Asp	Pro	Ser	Arg	Ile	Pro	Val	Asp	Leu	Pro	Glu	Ala	Arg	110	115	120
Cys	Leu	Cys	Leu	Gly	Cys	Val	Asn	Pro	Phe	Thr	Met	Gln	Glu	Asp	125	130	135
Arg	Ser	Met	Val	Ser	Val	Pro	Val	Phe	Ser	Gln	Val	Pro	Val	Arg	140	145	150
Arg	Arg	Leu	Cys	Pro	Pro	Pro	Pro	Arg	Thr	Gly	Pro	Cys	Arg	Gln	155	160	165
Arg	Ala	Val	Met	Glu	Thr	Ile	Ala	Val	Gly	Cys	Thr	Cys	Ile	Phe	170	175	180

<210> 447
 <211> 1484
 <212> DNA
 <213> Homo Sapien

<400> 447
 ggagtgcaga tggcatcctt cggttcttcc agacaagctg caagacgctg 50
 accatggcca agatggagct ctcgaaggcc ttctctggcc agcggacact 100
 cctatctgcc atcctcagca tgctatcact cagcttctcc acaacatccc 150
 tgctcagcaa ctactggttt gtgggcacac agaagggtgcc caagcccctg 200
 tgcgagaaag gtctggcagc caagtgcttt gacatgccag tgtccctgga 250
 tggagatacc aacacatcca cccaggaggt ggtacaatac aactgggaga 300
 ctgggggatga ccggttctcc ttccggagct tccggagtgg catgtggcta 350
 tcctgtgagg aaactgtgga agaaccaggg gagaggtgcc gaagtttcat 400
 tgaacttaca ccaccagcca agagaggtga gaaaggacta ctggaatttg 450
 ccacgttgca aggcccatgt caccctactc tccgatttgg agggaagcgg 500

ttgatggaga aggcctccct cccctcccct cccttggggc tttgtggcaa 550
 aaatcctatg gttatccctg ggaacgcaga tcacctacat cggacttcaa 600
 ttcatacagct tcctcctgct actaacagac ttgctactca ctgggaaccc 650
 tgctgtggg ctcaaactga gcgcctttgc tgctgtttcc tctgtcctgt 700
 caggtctcct ggggatggtg gccacatga tgtattcaca agtcttccaa 750
 gcgactgtca acttgggtcc agaagactgg agaccacatg tttggaatta 800
 tggctgggcc ttctacatgg cctggctctc cttcacctgc tgcattggcg 850
 cggctgtcac caccttcaac acgtacacca ggatggtgct ggagttcaag 900
 tgcaagcata gtaagagctt caaggaaaac ccgaactgcc taccacatca 950
 ccatcagtgt ttccctcggc ggctgtcaag tgcagcccc accgtgggtc 1000
 ctttgaccag ctaccaccag tatcataatc agcccatcca ctctgtctct 1050
 gagggagtcg acttctactc cgagctgcgg aacaagggat ttcaaagagg 1100
 ggccagccag gagctgaaag aagcagttag gtcattctgta gaggaagagc 1150
 agtgtttaga gttaagcggg tttggggagt aggcttgagc cctaccttac 1200
 acgtctgctg attatcaaca tgtgcttaag ccaacatccg tctcttgagc 1250
 atggttttta gaggctacga ataaggctat gaataagggt tatctttaag 1300
 tcctaaggga ttctggtg ccactgctct cttttcctct acagctccat 1350
 cttgtttcac ccacccca tctcacacat ccagaattcc cttctttact 1400
 gatagtttct gtgccaggtt ctgggctaaa ccatggagat aaaaagaaga 1450
 gtaaaatata cttcccgcacc ttaaggatct gaaa 1484

<210> 448

<211> 285

<212> PRT

<213> Homo Sapien

<400> 448

Met	Ala	Lys	Met	Glu	Leu	Ser	Lys	Ala	Phe	Ser	Gly	Gln	Arg	Thr
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Leu	Leu	Ser	Ala	Ile	Leu	Ser	Met	Leu	Ser	Leu	Ser	Phe	Ser	Thr
				20					25					30
Thr	Ser	Leu	Leu	Ser	Asn	Tyr	Trp	Phe	Val	Gly	Thr	Gln	Lys	Val
				35					40					45
Pro	Lys	Pro	Leu	Cys	Glu	Lys	Gly	Leu	Ala	Ala	Lys	Cys	Phe	Asp
				50					55					60

Met	Pro	Val	Ser	Leu	Asp	Gly	Asp	Thr	Asn	Thr	Ser	Thr	Gln	Glu	65	70	75
Val	Val	Gln	Tyr	Asn	Trp	Glu	Thr	Gly	Asp	Asp	Arg	Phe	Ser	Phe	80	85	90
Arg	Ser	Phe	Arg	Ser	Gly	Met	Trp	Leu	Ser	Cys	Glu	Glu	Thr	Val	95	100	105
Glu	Glu	Pro	Gly	Glu	Arg	Cys	Arg	Ser	Phe	Ile	Glu	Leu	Thr	Pro	110	115	120
Pro	Ala	Lys	Arg	Gly	Glu	Lys	Gly	Leu	Leu	Glu	Phe	Ala	Thr	Leu	125	130	135
Gln	Gly	Pro	Cys	His	Pro	Thr	Leu	Arg	Phe	Gly	Gly	Lys	Arg	Leu	140	145	150
Met	Glu	Lys	Ala	Ser	Leu	Pro	Ser	Pro	Pro	Leu	Gly	Leu	Cys	Gly	155	160	165
Lys	Asn	Pro	Met	Val	Ile	Pro	Gly	Asn	Ala	Asp	His	Leu	His	Arg	170	175	180
Thr	Ser	Ile	His	Gln	Leu	Pro	Pro	Ala	Thr	Asn	Arg	Leu	Ala	Thr	185	190	195
His	Trp	Glu	Pro	Cys	Leu	Trp	Ala	Gln	Thr	Glu	Arg	Leu	Cys	Cys	200	205	210
Cys	Phe	Leu	Cys	Pro	Val	Arg	Ser	Pro	Gly	Asp	Gly	Gly	Pro	His	215	220	225
Asp	Val	Phe	Thr	Ser	Leu	Pro	Ser	Asp	Cys	Gln	Leu	Gly	Ser	Arg	230	235	240
Arg	Leu	Glu	Thr	Thr	Cys	Leu	Glu	Leu	Trp	Leu	Gly	Leu	Leu	His	245	250	255
Gly	Leu	Ala	Leu	Leu	His	Leu	Leu	His	Gly	Val	Gly	Cys	His	His	260	265	270
Leu	Gln	His	Val	His	Gln	Asp	Gly	Ala	Gly	Val	Gln	Val	Gln	Ala	275	280	285

<210> 449

<211> 4104

<212> DNA

<213> Homo Sapien

<400> 449

cccacgcgtc cgcccacgcg tccgcccacg cgtccgcccac cgcgtccgcc 50

cacgcgtccg cccacgcgtc cgcccacgcg tccggtgcaa gctcgcgccg 100

cacactgcct ggtggaggga aggagcccgg gcgcctctcg ccgctccccg 150

cgccgcccgc cgcacctccc caccgcccgc cgcccgcgcg ccgcccgcgc 200

caaagcatga gtgagcccg c tctctgcagc tgcccggggc gcgaatggca 250
 ggctgtttcc gcggagtaaa aggtggcgcc ggtcagtggc cgtttccaat 300
 gacggacatt aaccagactg tcagatcctg gggagtcgcg agccccgagt 350
 ttggagtttt ttccccccac aacgtcacag tccgaactgc agagggaaag 400
 gaaggcggca ggaaggcgaa gctcgggctc cggcacgtag ttgggaaact 450
 tgccgggtcct agaagtcgcc tccccgcctt gccggccgcc cttgcagccc 500
 cgagccgagc agcaaagtga gacattgtgc gcctgccaga tccgccggcc 550
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 tataattagc ctgcacacaa agggagcagc tgaatggagg ttgtcactct 650
 ctggaaaagg atttctgacc gagcgcttcc aatggacatt ctccagtctc 700
 tctggaaaga ttctcgctaa tggatttctt gctgctcggc ctctgtctat 750
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 ctgccaaca ccaccttcg gcccatgcc aacctgcgca gcgtggacct 1150
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 gtgcgcatct tccaggactg ccgcagcctc aagtttctcg acatcggata 1300
 caatcagctc aagagtctgg cgcgcaactc ttctgcgggc ttgtttaagc 1350
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 cacttcccgc gcctcatctc cctgcactcg ctctgcctgc ggaggaacaa 1450
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 cccggagtac gcacagggcg aggacgtcct ggacgccgtg tacgccttcc 1800
 acctgtgcga ggatggggcc gagcccacca gcggccacct gctctcggcc 1850
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 gacagtgctt tgtcacgcag cgcaggaagc aaaagcagaa acagaccatg 2150
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ccctccattt gcagtacctt cccagctgat taaagttcag cagtgggtatt 3250
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atttgggtct gccattgaca gaatgtcaaa taaaaaggaa ttagctagaa 4050
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gtca 4104

<210> 450

<211> 522

<212> PRT

<213> Homo Sapien

<400> 450

Met	Asp	Phe	Leu	Leu	Leu	Gly	Leu	Cys	Leu	Tyr	Trp	Leu	Leu	Arg
1				5					10					15

Arg	Pro	Ser	Gly	Val	Val	Leu	Cys	Leu	Leu	Gly	Ala	Cys	Phe	Gln
				20					25					30

Met	Leu	Pro	Ala	Ala	Pro	Ser	Gly	Cys	Pro	Gln	Leu	Cys	Arg	Cys
				35					40					45

Glu	Gly	Arg	Leu	Leu	Tyr	Cys	Glu	Ala	Leu	Asn	Leu	Thr	Glu	Ala
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

				50					55					60
Pro	His	Asn	Leu	Ser	Gly	Leu	Leu	Gly	Leu	Ser	Leu	Arg	Tyr	Asn
				65					70					75
Ser	Leu	Ser	Glu	Leu	Arg	Ala	Gly	Gln	Phe	Thr	Gly	Leu	Met	Gln
				80					85					90
Leu	Thr	Trp	Leu	Tyr	Leu	Asp	His	Asn	His	Ile	Cys	Ser	Val	Gln
				95					100					105
Gly	Asp	Ala	Phe	Gln	Lys	Leu	Arg	Arg	Val	Lys	Glu	Leu	Thr	Leu
				110					115					120
Ser	Ser	Asn	Gln	Ile	Thr	Gln	Leu	Pro	Asn	Thr	Thr	Phe	Arg	Pro
				125					130					135
Met	Pro	Asn	Leu	Arg	Ser	Val	Asp	Leu	Ser	Tyr	Asn	Lys	Leu	Gln
				140					145					150
Ala	Leu	Ala	Pro	Asp	Leu	Phe	His	Gly	Leu	Arg	Lys	Leu	Thr	Thr
				155					160					165
Leu	His	Met	Arg	Ala	Asn	Ala	Ile	Gln	Phe	Val	Pro	Val	Arg	Ile
				170					175					180
Phe	Gln	Asp	Cys	Arg	Ser	Leu	Lys	Phe	Leu	Asp	Ile	Gly	Tyr	Asn
				185					190					195
Gln	Leu	Lys	Ser	Leu	Ala	Arg	Asn	Ser	Phe	Ala	Gly	Leu	Phe	Lys
				200					205					210
Leu	Thr	Glu	Leu	His	Leu	Glu	His	Asn	Asp	Leu	Val	Lys	Val	Asn
				215					220					225
Phe	Ala	His	Phe	Pro	Arg	Leu	Ile	Ser	Leu	His	Ser	Leu	Cys	Leu
				230					235					240
Arg	Arg	Asn	Lys	Val	Ala	Ile	Val	Val	Ser	Ser	Leu	Asp	Trp	Val
				245					250					255
Trp	Asn	Leu	Glu	Lys	Met	Asp	Leu	Ser	Gly	Asn	Glu	Ile	Glu	Tyr
				260					265					270
Met	Glu	Pro	His	Val	Phe	Glu	Thr	Val	Pro	His	Leu	Gln	Ser	Leu
				275					280					285
Gln	Leu	Asp	Ser	Asn	Arg	Leu	Thr	Tyr	Ile	Glu	Pro	Arg	Ile	Leu
				290					295					300
Asn	Ser	Trp	Lys	Ser	Leu	Thr	Ser	Ile	Thr	Leu	Ala	Gly	Asn	Leu
				305					310					315
Trp	Asp	Cys	Gly	Arg	Asn	Val	Cys	Ala	Leu	Ala	Ser	Trp	Leu	Ser
				320					325					330
Asn	Phe	Gln	Gly	Arg	Tyr	Asp	Gly	Asn	Leu	Gln	Cys	Ala	Ser	Pro
				335					340					345

Glu	Tyr	Ala	Gln	Gly	Glu	Asp	Val	Leu	Asp	Ala	Val	Tyr	Ala	Phe	350	355	360
His	Leu	Cys	Glu	Asp	Gly	Ala	Glu	Pro	Thr	Ser	Gly	His	Leu	Leu	365	370	375
Ser	Ala	Val	Thr	Asn	Arg	Ser	Asp	Leu	Gly	Pro	Pro	Ala	Ser	Ser	380	385	390
Ala	Thr	Thr	Leu	Ala	Asp	Gly	Gly	Glu	Gly	Gln	His	Asp	Gly	Thr	395	400	405
Phe	Glu	Pro	Ala	Thr	Val	Ala	Leu	Pro	Gly	Gly	Glu	His	Ala	Glu	410	415	420
Asn	Ala	Val	Gln	Ile	His	Lys	Val	Val	Thr	Gly	Thr	Met	Ala	Leu	425	430	435
Ile	Phe	Ser	Phe	Leu	Ile	Val	Val	Leu	Val	Leu	Tyr	Val	Ser	Trp	440	445	450
Lys	Cys	Phe	Pro	Ala	Ser	Leu	Arg	Gln	Leu	Arg	Gln	Cys	Phe	Val	455	460	465
Thr	Gln	Arg	Arg	Lys	Gln	Lys	Gln	Lys	Gln	Thr	Met	His	Gln	Met	470	475	480
Ala	Ala	Met	Ser	Ala	Gln	Glu	Tyr	Tyr	Val	Asp	Tyr	Lys	Pro	Asn	485	490	495
His	Ile	Glu	Gly	Ala	Leu	Val	Ile	Ile	Asn	Glu	Tyr	Gly	Ser	Cys	500	505	510
Thr	Cys	His	Gln	Gln	Pro	Ala	Arg	Glu	Cys	Glu	Val				515	520	

<210> 451
 <211> 2623
 <212> DNA
 <213> Homo Sapien

<400> 451
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 ctcccgcgct taccgcggc gcgccgagg gagtctctc cagaccctcc 100
 ctcccgttgc tccaaactaa tacggactga acggatcgct gcgagggtgg 150
 gagagaaaat tagggggaga aaggacagag agagcaacta ccatccatag 200
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 tggattccgt tgggattact tatataaagt tccaacgccc cattttcatt 400

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 aactcacgct catcctaatc ttactgttta caaaaaagaa gacgttccag 1150
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 tccacagatt tgtaccact actatgccac ctctcaata tcaactgcat 1400
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<210> 452

<211> 477

<212> PRT

<213> Homo Sapien

<400> 452

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Ser	Leu	Ser	Thr	Thr	Phe	Ser	Leu	Gln	Leu	Asp	Gln	Gln	Lys	Val
				20					25					30
Leu	Leu	Val	Ser	Phe	Asp	Gly	Phe	Arg	Trp	Asp	Tyr	Leu	Tyr	Lys
				35					40					45
Val	Pro	Thr	Pro	His	Phe	His	Tyr	Ile	Met	Lys	Tyr	Gly	Val	His
				50					55					60
Val	Lys	Gln	Val	Thr	Asn	Val	Phe	Ile	Thr	Lys	Thr	Tyr	Pro	Asn
				65					70					75
His	Tyr	Thr	Leu	Val	Thr	Gly	Leu	Phe	Ala	Glu	Asn	His	Gly	Ile
				80					85					90
Val	Ala	Asn	Asp	Met	Phe	Asp	Pro	Ile	Arg	Asn	Lys	Ser	Phe	Ser
				95					100					105

Leu	Asp	His	Met	Asn	Ile	Tyr	Asp	Ser	Lys	Phe	Trp	Glu	Glu	Ala	
				110					115					120	
Thr	Pro	Ile	Trp	Ile	Thr	Asn	Gln	Arg	Ala	Gly	His	Thr	Ser	Gly	
				125					130					135	
Ala	Ala	Met	Trp	Pro	Gly	Thr	Asp	Val	Lys	Ile	His	Lys	Arg	Phe	
				140					145					150	
Pro	Thr	His	Tyr	Met	Pro	Tyr	Asn	Glu	Ser	Val	Ser	Phe	Glu	Asp	
				155					160					165	
Arg	Val	Ala	Lys	Ile	Val	Glu	Trp	Phe	Thr	Ser	Lys	Glu	Pro	Ile	
				170					175					180	
Asn	Leu	Gly	Leu	Leu	Tyr	Trp	Glu	Asp	Pro	Asp	Asp	Met	Gly	His	
				185					190					195	
His	Leu	Gly	Pro	Asp	Ser	Pro	Leu	Met	Gly	Pro	Val	Ile	Ser	Asp	
				200					205					210	
Ile	Asp	Lys	Lys	Leu	Gly	Tyr	Leu	Ile	Gln	Met	Leu	Lys	Lys	Ala	
				215					220					225	
Lys	Leu	Trp	Asn	Thr	Leu	Asn	Leu	Ile	Ile	Thr	Ser	Asp	His	Gly	
				230					235					240	
Met	Thr	Gln	Cys	Ser	Glu	Glu	Arg	Leu	Ile	Glu	Leu	Asp	Gln	Tyr	
				245					250					255	
Leu	Asp	Lys	Asp	His	Tyr	Thr	Leu	Ile	Asp	Gln	Ser	Pro	Val	Ala	
				260					265					270	
Ala	Ile	Leu	Pro	Lys	Glu	Gly	Lys	Phe	Asp	Glu	Val	Tyr	Glu	Ala	
				275					280					285	
Leu	Thr	His	Ala	His	Pro	Asn	Leu	Thr	Val	Tyr	Lys	Lys	Glu	Asp	
				290					295					300	
Val	Pro	Glu	Arg	Trp	His	Tyr	Lys	Tyr	Asn	Ser	Arg	Ile	Gln	Pro	
				305					310					315	
Ile	Ile	Ala	Val	Ala	Asp	Glu	Gly	Trp	His	Ile	Leu	Gln	Asn	Lys	
				320					325					330	
Ser	Asp	Asp	Phe	Leu	Leu	Gly	Asn	His	Gly	Tyr	Asp	Asn	Ala	Leu	
				335					340					345	
Ala	Asp	Met	His	Pro	Ile	Phe	Leu	Ala	His	Gly	Pro	Ala	Phe	Arg	
				350					355					360	
Lys	Asn	Phe	Ser	Lys	Glu	Ala	Met	Asn	Ser	Thr	Asp	Leu	Tyr	Pro	
				365					370					375	
Leu	Leu	Cys	His	Leu	Leu	Asn	Ile	Thr	Ala	Met	Pro	His	Asn	Gly	
				380					385					390	
Ser	Phe	Trp	Asn	Val	Gln	Asp	Leu	Leu	Asn	Ser	Ala	Met	Pro	Arg	

395	400	405
Val Val Pro Tyr Thr Gln Ser Thr Ile Leu Leu Pro Gly Ser Val		
410	415	420
Lys Pro Ala Glu Tyr Asp Gln Glu Gly Ser Tyr Pro Tyr Phe Ile		
425	430	435
Gly Val Ser Leu Gly Ser Ile Ile Val Ile Val Phe Phe Val Ile		
440	445	450
Phe Ile Lys His Leu Ile His Ser Gln Ile Pro Ala Leu Gln Asp		
455	460	465
Met His Ala Glu Ile Ala Gln Pro Leu Leu Gln Ala		
470	475	

<210> 453
 <211> 1674
 <212> DNA
 <213> Homo Sapien

<400> 453
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 cctcagtcac cagaacctga aggagtttgc cctgaccaac ccagagaaga 200
 gcagcaccaa agaaacggag agaaaagaaa ccaaagccga ggaggagctg 250
 gatgccgaag tcctggaggt gttccaccgc acgcatgagt ggcaggccct 300
 tcagccaggg caggctgtcc ctgcaggatc ccacgtacgg ctgaatcttc 350
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 aatttgaaag gcaaaaggct ggatatcaac accaacacct acacatctca 450
 ggatctcaag agtgcactgg caaaattcaa ggagggggca gagatggaga 500
 gttcaaagga agacaaggca aggcaggctg aggtaaagcg gctcttcgcg 550
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 gactgacatg cagatcatgg tacggctgat caacaagttc aatagttcca 650
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 gtccatcaga tggacaatgc gcaggacctg ctttcctttg gtggtcttca 750
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 ctgcgtttgt gctgggcgct gccttttcca gcaaccccaa ggtccagggtg 850
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ggagcagccg ctactgcaa agaagaaggt cctgtttgca ctgtgctccc 950
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aaaaaaaaaa aaaaaaaaaa aaaa 1674

<210> 454
<211> 461
<212> PRT
<213> Homo Sapien

<400> 454
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20 25 30
Ser His Gln Asn Leu Lys Glu Phe Ala Leu Thr Asn Pro Glu Lys
35 40 45
Ser Ser Thr Lys Glu Thr Glu Arg Lys Glu Thr Lys Ala Glu Glu
50 55 60
Glu Leu Asp Ala Glu Val Leu Glu Val Phe His Pro Thr His Glu
65 70 75
Trp Gln Ala Leu Gln Pro Gly Gln Ala Val Pro Ala Gly Ser His
80 85 90
Val Arg Leu Asn Leu Gln Thr Gly Glu Arg Glu Ala Lys Leu Gln
95 100 105

Tyr	Glu	Asp	Lys	Phe	Arg	Asn	Asn	Leu	Lys	Gly	Lys	Arg	Leu	Asp	
				110					115					120	
Ile	Asn	Thr	Asn	Thr	Tyr	Thr	Ser	Gln	Asp	Leu	Lys	Ser	Ala	Leu	
				125					130					135	
Ala	Lys	Phe	Lys	Glu	Gly	Ala	Glu	Met	Glu	Ser	Ser	Lys	Glu	Asp	
				140					145					150	
Lys	Ala	Arg	Gln	Ala	Glu	Val	Lys	Arg	Leu	Phe	Arg	Pro	Ile	Glu	
				155					160					165	
Glu	Leu	Lys	Lys	Asp	Phe	Asp	Glu	Leu	Asn	Val	Val	Ile	Glu	Thr	
				170					175					180	
Asp	Met	Gln	Ile	Met	Val	Arg	Leu	Ile	Asn	Lys	Phe	Asn	Ser	Ser	
				185					190					195	
Ser	Ser	Ser	Leu	Glu	Glu	Lys	Ile	Ala	Ala	Leu	Phe	Asp	Leu	Glu	
				200					205					210	
Tyr	Tyr	Val	His	Gln	Met	Asp	Asn	Ala	Gln	Asp	Leu	Leu	Ser	Phe	
				215					220					225	
Gly	Gly	Leu	Gln	Val	Val	Ile	Asn	Gly	Leu	Asn	Ser	Thr	Glu	Pro	
				230					235					240	
Leu	Val	Lys	Glu	Tyr	Ala	Ala	Phe	Val	Leu	Gly	Ala	Ala	Phe	Ser	
				245					250					255	
Ser	Asn	Pro	Lys	Val	Gln	Val	Glu	Ala	Ile	Glu	Gly	Gly	Ala	Leu	
				260					265					270	
Gln	Lys	Leu	Leu	Val	Ile	Leu	Ala	Thr	Glu	Gln	Pro	Leu	Thr	Ala	
				275					280					285	
Lys	Lys	Lys	Val	Leu	Phe	Ala	Leu	Cys	Ser	Leu	Leu	Arg	His	Phe	
				290					295					300	
Pro	Tyr	Ala	Gln	Arg	Gln	Phe	Leu	Lys	Leu	Gly	Gly	Leu	Gln	Val	
				305					310					315	
Leu	Arg	Thr	Leu	Val	Gln	Glu	Lys	Gly	Thr	Glu	Val	Leu	Ala	Val	
				320					325					330	
Arg	Val	Val	Thr	Leu	Leu	Tyr	Asp	Leu	Val	Thr	Glu	Lys	Met	Phe	
				335					340					345	
Ala	Glu	Glu	Glu	Ala	Glu	Leu	Thr	Gln	Glu	Met	Ser	Pro	Glu	Lys	
				350					355					360	
Leu	Gln	Gln	Tyr	Arg	Gln	Val	His	Leu	Leu	Pro	Gly	Leu	Trp	Glu	
				365					370					375	
Gln	Gly	Trp	Cys	Glu	Ile	Thr	Ala	His	Leu	Leu	Ala	Leu	Pro	Glu	
				380					385					390	
His	Asp	Ala	Arg	Glu	Lys	Val	Leu	Gln	Thr	Leu	Gly	Val	Leu	Leu	

395	400	405
Thr Thr Cys Arg Asp Arg Tyr Arg Gln Asp Pro Gln Leu Gly Arg		
410	415	420
Thr Leu Ala Ser Leu Gln Ala Glu Tyr Gln Val Leu Ala Ser Leu		
425	430	435
Glu Leu Gln Asp Gly Glu Asp Glu Gly Tyr Phe Gln Glu Leu Leu		
440	445	450
Gly Ser Val Asn Ser Leu Leu Lys Glu Leu Arg		
455	460	

<210> 455
 <211> 1570
 <212> DNA
 <213> Homo Sapien

<400> 455
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 ctggtgaggg tggctcagca ggcaggggaag gagaggtgtc tgtgcgtcct 200
 gcaccacat ctttctctgt cccctccttg cctgtcttg aggctgctag 250
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 ggtggcccggt ccttgtggtt cctctctacc tggggaaata aggtgcagcg 350
 gccatggcta cagcaagacc cccctggatg tgggtgctct gtgctctgat 400
 cacagccttg cttctggggg tcacagagca tgttctcgcc aacaatgatg 450
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 ctgggagctg gggccgggga agacgcccgg tcggatgaca gcagcagccg 550
 catcatcaat ggatccgact gcgatatgca caccagccg tggcaggccg 600
 cgctgttgct aaggcccaac cagctctact gcggggcggt gttggtgcat 650
 ccacagtggc tgctcacggc cgcccactgc aggaagaaag ttttcagagt 700
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 ctgaccccat gtctcctgga ctgagggtct gcttccccca cattgggctg 1400
 accgtgtctc tctagttgaa ccctgggaac aatttccaaa actgtccagg 1450
 gcggggggttg cgtctcaatc tcctgggggc actttcatcc tcaagctcag 1500
 ggcccatccc ttctctgcag ctctgacca aatttagtcc cagaaataaa 1550
 ctgagaagtg gaaaaaaaaa 1570

<210> 456
 <211> 293
 <212> PRT
 <213> Homo Sapien

<400> 456
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 20 25 30
 Asn Asp Val Ser Cys Asp His Pro Ser Asn Thr Val Pro Ser Gly
 35 40 45
 Ser Asn Gln Asp Leu Gly Ala Gly Ala Gly Glu Asp Ala Arg Ser
 50 55 60
 Asp Asp Ser Ser Ser Arg Ile Ile Asn Gly Ser Asp Cys Asp Met
 65 70 75
 His Thr Gln Pro Trp Gln Ala Ala Leu Leu Leu Arg Pro Asn Gln
 80 85 90
 Leu Tyr Cys Gly Ala Val Leu Val His Pro Gln Trp Leu Leu Thr
 95 100 105
 Ala Ala His Cys Arg Lys Lys Val Phe Arg Val Arg Leu Gly His
 110 115 120
 Tyr Ser Leu Ser Pro Val Tyr Glu Ser Gly Gln Gln Met Phe Gln
 125 130 135

Gly	Val	Lys	Ser	Ile	Pro	His	Pro	Gly	Tyr	Ser	His	Pro	Gly	His	140	145	150
Ser	Asn	Asp	Leu	Met	Leu	Ile	Lys	Leu	Asn	Arg	Arg	Ile	Arg	Pro	155	160	165
Thr	Lys	Asp	Val	Arg	Pro	Ile	Asn	Val	Ser	Ser	His	Cys	Pro	Ser	170	175	180
Ala	Gly	Thr	Lys	Cys	Leu	Val	Ser	Gly	Trp	Gly	Thr	Thr	Lys	Ser	185	190	195
Pro	Gln	Val	His	Phe	Pro	Lys	Val	Leu	Gln	Cys	Leu	Asn	Ile	Ser	200	205	210
Val	Leu	Ser	Gln	Lys	Arg	Cys	Glu	Asp	Ala	Tyr	Pro	Arg	Gln	Ile	215	220	225
Asp	Asp	Thr	Met	Phe	Cys	Ala	Gly	Asp	Lys	Ala	Gly	Arg	Asp	Ser	230	235	240
Cys	Gln	Gly	Asp	Ser	Gly	Gly	Pro	Val	Val	Cys	Asn	Gly	Ser	Leu	245	250	255
Gln	Gly	Leu	Val	Ser	Trp	Gly	Asp	Tyr	Pro	Cys	Ala	Arg	Pro	Asn	260	265	270
Arg	Pro	Gly	Val	Tyr	Thr	Asn	Leu	Cys	Lys	Phe	Thr	Lys	Trp	Ile	275	280	285
Gln	Glu	Thr	Ile	Gln	Ala	Asn	Ser								290		

<210> 457
 <211> 1841
 <212> DNA
 <213> Homo Sapien

<400> 457
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 ccaagtacag cagcagcagg gacatgctgg atgatgatgg ggacaccacc 200
 atgagcctgc attctcaagc ctctgccaca actcggcatc cagagccccg 250
 gcgcacagag cacagggctc cctcttcaac gtggcgacca gtggccctga 300
 ccctgctgac tttgtgcttg gtgctgctga tagggctggc agccctgggg 350
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 aatctcaa at ctcaatgcct tataagcatt ccttcctgtg tccattaaga 1600
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<210> 458
 <211> 280
 <212> PRT
 <213> Homo Sapien

<400> 458

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				20					25					30
Arg	His	Pro	Glu	Pro	Arg	Arg	Thr	Glu	His	Arg	Ala	Pro	Ser	Ser
				35					40					45
Thr	Trp	Arg	Pro	Val	Ala	Leu	Thr	Leu	Leu	Thr	Leu	Cys	Leu	Val
				50					55					60
Leu	Leu	Ile	Gly	Leu	Ala	Ala	Leu	Gly	Leu	Leu	Phe	Phe	Gln	Tyr
				65					70					75
Tyr	Gln	Leu	Ser	Asn	Thr	Gly	Gln	Asp	Thr	Ile	Ser	Gln	Met	Glu
				80					85					90
Glu	Arg	Leu	Gly	Asn	Thr	Ser	Gln	Glu	Leu	Gln	Ser	Leu	Gln	Val
				95					100					105
Gln	Asn	Ile	Lys	Leu	Ala	Gly	Ser	Leu	Gln	His	Val	Ala	Glu	Lys
				110					115					120
Leu	Cys	Arg	Glu	Leu	Tyr	Asn	Lys	Ala	Gly	Ala	His	Arg	Cys	Ser
				125					130					135
Pro	Cys	Thr	Glu	Gln	Trp	Lys	Trp	His	Gly	Asp	Asn	Cys	Tyr	Gln
				140					145					150
Phe	Tyr	Lys	Asp	Ser	Lys	Ser	Trp	Glu	Asp	Cys	Lys	Tyr	Phe	Cys
				155					160					165
Leu	Ser	Glu	Asn	Ser	Thr	Met	Leu	Lys	Ile	Asn	Lys	Gln	Glu	Asp
				170					175					180
Leu	Glu	Phe	Ala	Ala	Ser	Gln	Ser	Tyr	Ser	Glu	Phe	Phe	Tyr	Ser
				185					190					195
Tyr	Trp	Thr	Gly	Leu	Leu	Arg	Pro	Asp	Ser	Gly	Lys	Ala	Trp	Leu
				200					205					210
Trp	Met	Asp	Gly	Thr	Pro	Phe	Thr	Ser	Glu	Leu	Phe	His	Ile	Ile
				215					220					225
Ile	Asp	Val	Thr	Ser	Pro	Arg	Ser	Arg	Asp	Cys	Val	Ala	Ile	Leu
				230					235					240
Asn	Gly	Met	Ile	Phe	Ser	Lys	Asp	Cys	Lys	Glu	Leu	Lys	Arg	Cys
				245					250					255
Val	Cys	Glu	Arg	Arg	Ala	Gly	Met	Val	Lys	Pro	Glu	Ser	Leu	His
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Val	Pro	Pro	Glu	Thr	Leu	Gly	Glu	Gly	Asp					
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<211> 1337
<212> DNA
<213> Homo Sapien

<400> 459
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accagctgtc tgtggagaga atggggtgct ttcgtcaggg actgctgacg 1250
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tatttttgct ggttttgaaa aaaaaaaaaa aaaaaaa 1337

<210> 460
<211> 224
<212> PRT
<213> Homo Sapien

<400> 460
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Met Lys Thr Ile Arg Leu Pro Arg Trp Leu Ala Ala Ser Pro Thr
35 40 45
Lys Glu Ile Gln Val Lys Lys Tyr Lys Cys Gly Leu Ile Lys Pro
50 55 60
Cys Pro Ala Asn Tyr Phe Ala Phe Lys Ile Cys Ser Gly Ala Ala
65 70 75
Asn Val Val Gly Pro Thr Met Cys Phe Glu Asp Arg Met Ile Met
80 85 90
Ser Pro Val Lys Asn Asn Val Gly Arg Gly Leu Asn Ile Ala Leu
95 100 105
Val Asn Gly Thr Thr Gly Ala Val Leu Gly Gln Lys Ala Phe Asp
110 115 120
Met Tyr Ser Gly Asp Val Met His Leu Val Lys Phe Leu Lys Glu
125 130 135
Ile Pro Gly Gly Ala Leu Val Leu Val Ala Ser Tyr Asp Asp Pro
140 145 150
Gly Thr Lys Met Asn Asp Glu Ser Arg Lys Leu Phe Ser Asp Leu
155 160 165
Gly Ser Ser Tyr Ala Lys Gln Leu Gly Phe Arg Asp Ser Trp Val
170 175 180
Phe Ile Gly Ala Lys Asp Leu Arg Gly Lys Ser Pro Phe Glu Gln
185 190 195
Phe Leu Lys Asn Ser Pro Asp Thr Asn Lys Tyr Glu Gly Trp Pro
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Glu Leu Leu Glu Met Glu Gly Cys Met Pro Pro Lys Pro Phe
215 220

<210> 461
<211> 2528
<212> DNA
<213> Homo Sapien

<400> 461

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gccccaggac atgcagaacc ttcctctaga acccgacca ccaccatgag 150
gtcctgcctg tggagatgca ggcacctgag ccaaggcgtc cagtggtcct 200
tgcttctggc tgtcctggtc ttctttctct tcgccttgcc ctcttttatt 250
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agaaaggtct ctacagtccc tggcaaagcc taagtcccag gcaccacaa 350
gggcgaggag gacaaccatc tatgcagagc cagcgccaga gaacaatgcc 400
ctcaacacac aaaccagcc caaggccac accaccggag acagaggaaa 450
ggaggccaac caggcaccgc cggaggagca ggacaaggtg cccacacag 500
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ggatgtgggg actcggacat ccttctacgg ctttaccgcc ttctccctga 1400
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Gln	Arg	Thr	Glu	Asn	Ile	Lys	Glu	Arg	Ser	Leu	Gln	Ser	Leu	Ala	
				50					55					60	
Lys	Pro	Lys	Ser	Gln	Ala	Pro	Thr	Arg	Ala	Arg	Arg	Thr	Thr	Ile	
				65					70					75	
Tyr	Ala	Glu	Pro	Ala	Pro	Glu	Asn	Asn	Ala	Leu	Asn	Thr	Gln	Thr	
				80					85					90	
Gln	Pro	Lys	Ala	His	Thr	Thr	Gly	Asp	Arg	Gly	Lys	Glu	Ala	Asn	
				95					100					105	
Gln	Ala	Pro	Pro	Glu	Glu	Gln	Asp	Lys	Val	Pro	His	Thr	Ala	Gln	
				110					115					120	
Arg	Ala	Ala	Trp	Lys	Ser	Pro	Glu	Lys	Glu	Lys	Thr	Met	Val	Asn	
				125					130					135	
Thr	Leu	Ser	Pro	Arg	Gly	Gln	Asp	Ala	Gly	Met	Ala	Ser	Gly	Arg	
				140					145					150	
Thr	Glu	Ala	Gln	Ser	Trp	Lys	Ser	Gln	Asp	Thr	Lys	Thr	Thr	Gln	
				155					160					165	
Gly	Asn	Gly	Gly	Gln	Thr	Arg	Lys	Leu	Thr	Ala	Ser	Arg	Thr	Val	
				170					175					180	
Ser	Glu	Lys	His	Gln	Gly	Lys	Ala	Ala	Thr	Thr	Ala	Lys	Thr	Leu	
				185					190					195	
Ile	Pro	Lys	Ser	Gln	His	Arg	Met	Leu	Ala	Pro	Thr	Gly	Ala	Val	
				200					205					210	
Ser	Thr	Arg	Thr	Arg	Gln	Lys	Gly	Val	Thr	Thr	Ala	Val	Ile	Pro	
				215					220					225	
Pro	Lys	Glu	Lys	Lys	Pro	Gln	Ala	Thr	Pro	Pro	Pro	Ala	Pro	Phe	
				230					235					240	
Gln	Ser	Pro	Thr	Thr	Gln	Arg	Asn	Gln	Arg	Leu	Lys	Ala	Ala	Asn	
				245					250					255	
Phe	Lys	Ser	Glu	Pro	Arg	Trp	Asp	Phe	Glu	Glu	Lys	Tyr	Ser	Phe	
				260					265					270	
Glu	Ile	Gly	Gly	Leu	Gln	Thr	Thr	Cys	Pro	Asp	Ser	Val	Lys	Ile	
				275					280					285	
Lys	Ala	Ser	Lys	Ser	Leu	Trp	Leu	Gln	Lys	Leu	Phe	Leu	Pro	Asn	
				290					295					300	
Leu	Thr	Leu	Phe	Leu	Asp	Ser	Arg	His	Phe	Asn	Gln	Ser	Glu	Trp	
				305					310					315	
Asp	Arg	Leu	Glu	His	Phe	Ala	Pro	Pro	Phe	Gly	Phe	Met	Glu	Leu	
				320					325					330	
Asn	Tyr	Ser	Leu	Val	Gln	Lys	Val	Val	Thr	Arg	Phe	Pro	Pro	Val	

	335		340		345									
Pro	Gln	Gln	Gln	Leu	Leu	Leu	Ala	Ser	Leu	Pro	Ala	Gly	Ser	Leu
				350					355					360
Arg	Cys	Ile	Thr	Cys	Ala	Val	Val	Gly	Asn	Gly	Gly	Ile	Leu	Asn
				365					370					375
Asn	Ser	His	Met	Gly	Gln	Glu	Ile	Asp	Ser	His	Asp	Tyr	Val	Phe
				380					385					390
Arg	Leu	Ser	Gly	Ala	Leu	Ile	Lys	Gly	Tyr	Glu	Gln	Asp	Val	Gly
				395					400					405
Thr	Arg	Thr	Ser	Phe	Tyr	Gly	Phe	Thr	Ala	Phe	Ser	Leu	Thr	Gln
				410					415					420
Ser	Leu	Leu	Ile	Leu	Gly	Asn	Arg	Gly	Phe	Lys	Asn	Val	Pro	Leu
				425					430					435
Gly	Lys	Asp	Val	Arg	Tyr	Leu	His	Phe	Leu	Glu	Gly	Thr	Arg	Asp
				440					445					450
Tyr	Glu	Trp	Leu	Glu	Ala	Leu	Leu	Met	Asn	Gln	Thr	Val	Met	Ser
				455					460					465
Lys	Asn	Leu	Phe	Trp	Phe	Arg	His	Arg	Pro	Gln	Glu	Ala	Phe	Arg
				470					475					480
Glu	Ala	Leu	His	Met	Asp	Arg	Tyr	Leu	Leu	Leu	His	Pro	Asp	Phe
				485					490					495
Leu	Arg	Tyr	Met	Lys	Asn	Arg	Phe	Leu	Arg	Ser	Lys	Thr	Leu	Asp
				500					505					510
Gly	Ala	His	Trp	Arg	Ile	Tyr	Arg	Pro	Thr	Thr	Gly	Ala	Leu	Leu
				515					520					525
Leu	Leu	Thr	Ala	Leu	Gln	Leu	Cys	Asp	Gln	Val	Ser	Ala	Tyr	Gly
				530					535					540
Phe	Ile	Thr	Glu	Gly	His	Glu	Arg	Phe	Ser	Asp	His	Tyr	Tyr	Asp
				545					550					555
Thr	Ser	Trp	Lys	Arg	Leu	Ile	Phe	Tyr	Ile	Asn	His	Asp	Phe	Lys
				560					565					570
Leu	Glu	Arg	Glu	Val	Trp	Lys	Arg	Leu	His	Asp	Glu	Gly	Ile	Ile
				575					580					585
Arg	Leu	Tyr	Gln	Arg	Pro	Gly	Pro	Gly	Thr	Ala	Lys	Ala	Lys	Asn
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<210> 463
 <211> 3226
 <212> DNA
 <213> Homo Sapien

<400> 463

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tctcttaact gtgtccactc cttcatggtg tcagagcact gaagcatctc 200
caaaacgtag tgatgggaca ccatttcctt ggaataaaat acgacttcct 250
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<210> 464
 <211> 941
 <212> PRT
 <213> Homo Sapien

<400> 464
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 35 40 45
 Pro Phe Pro Trp Asn Lys Ile Arg Leu Pro Glu Tyr Val Ile Pro
 50 55 60
 Val His Tyr Asp Leu Leu Ile His Ala Asn Leu Thr Thr Leu Thr
 65 70 75
 Phe Trp Gly Thr Thr Lys Val Glu Ile Thr Ala Ser Gln Pro Thr
 80 85 90
 Ser Thr Ile Ile Leu His Ser His His Leu Gln Ile Ser Arg Ala
 95 100 105
 Thr Leu Arg Lys Gly Ala Gly Glu Arg Leu Ser Glu Glu Pro Leu
 110 115 120
 Gln Val Leu Glu His Pro Pro Gln Glu Gln Ile Ala Leu Leu Ala
 125 130 135
 Pro Glu Pro Leu Leu Val Gly Leu Pro Tyr Thr Val Val Ile His
 140 145 150
 Tyr Ala Gly Asn Leu Ser Glu Thr Phe His Gly Phe Tyr Lys Ser
 155 160 165
 Thr Tyr Arg Thr Lys Glu Gly Glu Leu Arg Ile Leu Ala Ser Thr
 170 175 180
 Gln Phe Glu Pro Thr Ala Ala Arg Met Ala Phe Pro Cys Phe Asp
 185 190 195

Glu	Pro	Ala	Phe	Lys	Ala	Ser	Phe	Ser	Ile	Lys	Ile	Arg	Arg	Glu
				200					205					210
Pro	Arg	His	Leu	Ala	Ile	Ser	Asn	Met	Pro	Leu	Val	Lys	Ser	Val
				215					220					225
Thr	Val	Ala	Glu	Gly	Leu	Ile	Glu	Asp	His	Phe	Asp	Val	Thr	Val
				230					235					240
Lys	Met	Ser	Thr	Tyr	Leu	Val	Ala	Phe	Ile	Ile	Ser	Asp	Phe	Glu
				245					250					255
Ser	Val	Ser	Lys	Ile	Thr	Lys	Ser	Gly	Val	Lys	Val	Ser	Val	Tyr
				260					265					270
Ala	Val	Pro	Asp	Lys	Ile	Asn	Gln	Ala	Asp	Tyr	Ala	Leu	Asp	Ala
				275					280					285
Ala	Val	Thr	Leu	Leu	Glu	Phe	Tyr	Glu	Asp	Tyr	Phe	Ser	Ile	Pro
				290					295					300
Tyr	Pro	Leu	Pro	Lys	Gln	Asp	Leu	Ala	Ala	Ile	Pro	Asp	Phe	Gln
				305					310					315
Ser	Gly	Ala	Met	Glu	Asn	Trp	Gly	Leu	Thr	Thr	Tyr	Arg	Glu	Ser
				320					325					330
Ala	Leu	Leu	Phe	Asp	Ala	Glu	Lys	Ser	Ser	Ala	Ser	Ser	Lys	Leu
				335					340					345
Gly	Ile	Thr	Val	Thr	Val	Ala	His	Glu	Leu	Ala	His	Gln	Trp	Phe
				350					355					360
Gly	Asn	Leu	Val	Thr	Met	Glu	Trp	Trp	Asn	Asp	Leu	Trp	Leu	Asn
				365					370					375
Glu	Gly	Phe	Ala	Lys	Phe	Met	Glu	Phe	Val	Ser	Val	Ser	Val	Thr
				380					385					390
His	Pro	Glu	Leu	Lys	Val	Gly	Asp	Tyr	Phe	Phe	Gly	Lys	Cys	Phe
				395					400					405
Asp	Ala	Met	Glu	Val	Asp	Ala	Leu	Asn	Ser	Ser	His	Pro	Val	Ser
				410					415					420
Thr	Pro	Val	Glu	Asn	Pro	Ala	Gln	Ile	Arg	Glu	Met	Phe	Asp	Asp
				425					430					435
Val	Ser	Tyr	Asp	Lys	Gly	Ala	Cys	Ile	Leu	Asn	Met	Leu	Arg	Glu
				440					445					450
Tyr	Leu	Ser	Ala	Asp	Ala	Phe	Lys	Ser	Gly	Ile	Val	Gln	Tyr	Leu
				455					460					465
Gln	Lys	His	Ser	Tyr	Lys	Asn	Thr	Lys	Asn	Glu	Asp	Leu	Trp	Asp
				470					475					480
Ser	Met	Ala	Ser	Ile	Cys	Pro	Thr	Asp	Gly	Val	Lys	Gly	Met	Asp

Gly	Phe	Cys	Ser	Arg	Ser	Gln	His	Ser	Ser	Ser	Ser	Ser	His	Trp
				500					505					510
His	Gln	Glu	Gly	Val	Asp	Val	Lys	Thr	Met	Met	Asn	Thr	Trp	Thr
				515					520					525
Leu	Gln	Arg	Gly	Phe	Pro	Leu	Ile	Thr	Ile	Thr	Val	Arg	Gly	Arg
				530					535					540
Asn	Val	His	Met	Lys	Gln	Glu	His	Tyr	Met	Lys	Gly	Ser	Asp	Gly
				545					550					555
Ala	Pro	Asp	Thr	Gly	Tyr	Leu	Trp	His	Val	Pro	Leu	Thr	Phe	Ile
				560					565					570
Thr	Ser	Lys	Ser	Asn	Met	Val	His	Arg	Phe	Leu	Leu	Lys	Thr	Lys
				575					580					585
Thr	Asp	Val	Leu	Ile	Leu	Pro	Glu	Glu	Val	Glu	Trp	Ile	Lys	Phe
				590					595					600
Asn	Val	Gly	Met	Asn	Gly	Tyr	Tyr	Ile	Val	His	Tyr	Glu	Asp	Asp
				605					610					615
Gly	Trp	Asp	Ser	Leu	Thr	Gly	Leu	Leu	Lys	Gly	Thr	His	Thr	Ala
				620					625					630
Val	Ser	Ser	Asn	Asp	Arg	Ala	Ser	Leu	Ile	Asn	Asn	Ala	Phe	Gln
				635					640					645
Leu	Val	Ser	Ile	Gly	Lys	Leu	Ser	Ile	Glu	Lys	Ala	Leu	Asp	Leu
				650					655					660
Ser	Leu	Tyr	Leu	Lys	His	Glu	Thr	Glu	Ile	Met	Pro	Val	Phe	Gln
				665					670					675
Gly	Leu	Asn	Glu	Leu	Ile	Pro	Met	Tyr	Lys	Leu	Met	Glu	Lys	Arg
				680					685					690
Asp	Met	Asn	Glu	Val	Glu	Thr	Gln	Phe	Lys	Ala	Phe	Leu	Ile	Arg
				695					700					705
Leu	Leu	Arg	Asp	Leu	Ile	Asp	Lys	Gln	Thr	Trp	Thr	Asp	Glu	Gly
				710					715					720
Ser	Val	Ser	Glu	Gln	Met	Leu	Arg	Ser	Glu	Leu	Leu	Leu	Leu	Ala
				725					730					735
Cys	Val	His	Asn	Tyr	Gln	Pro	Cys	Val	Gln	Arg	Ala	Glu	Gly	Tyr
				740					745					750
Phe	Arg	Lys	Trp	Lys	Glu	Ser	Asn	Gly	Asn	Leu	Ser	Leu	Pro	Val
				755					760					765
Asp	Val	Thr	Leu	Ala	Val	Phe	Ala	Val	Gly	Ala	Gln	Ser	Thr	Glu
				770					775					780

Gly	Trp	Asp	Phe	Leu	Tyr	Ser	Lys	Tyr	Gln	Phe	Ser	Leu	Ser	Ser	785	790	795
Thr	Glu	Lys	Ser	Gln	Ile	Glu	Phe	Ala	Leu	Cys	Arg	Thr	Gln	Asn	800	805	810
Lys	Glu	Lys	Leu	Gln	Trp	Leu	Leu	Asp	Glu	Ser	Phe	Lys	Gly	Asp	815	820	825
Lys	Ile	Lys	Thr	Gln	Glu	Phe	Pro	Gln	Ile	Leu	Thr	Leu	Ile	Gly	830	835	840
Arg	Asn	Pro	Val	Gly	Tyr	Pro	Leu	Ala	Trp	Gln	Phe	Leu	Arg	Lys	845	850	855
Asn	Trp	Asn	Lys	Leu	Val	Gln	Lys	Phe	Glu	Leu	Gly	Ser	Ser	Ser	860	865	870
Ile	Ala	His	Met	Val	Met	Gly	Thr	Thr	Asn	Gln	Phe	Ser	Thr	Arg	875	880	885
Thr	Arg	Leu	Glu	Glu	Val	Lys	Gly	Phe	Phe	Ser	Ser	Leu	Lys	Glu	890	895	900
Asn	Gly	Ser	Gln	Leu	Arg	Cys	Val	Gln	Gln	Thr	Ile	Glu	Thr	Ile	905	910	915
Glu	Glu	Asn	Ile	Gly	Trp	Met	Asp	Lys	Asn	Phe	Asp	Lys	Ile	Arg	920	925	930
Val	Trp	Leu	Gln	Ser	Glu	Lys	Leu	Glu	Arg	Met					935	940	

<210> 465
 <211> 1587
 <212> DNA
 <213> Homo Sapien

<400> 465
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 gttcagcatg tgtggaaggt gtccgaccta ccccggaat ggaccctaa 150
 gaacaccagc tgcgacagcg gcttgggggtg ccaggacacg ttgatgctca 200
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 ggatccttga ggtgcccagt ctgcttgtct atggaaggct gtctggaggg 450
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 aatggccttg gacaccagat tctttcccat tctgtccatg aatcatcttc 1450
 cccacacaca atcattcata tctactcacc taacagcaac actggggaga 1500
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 gctgcatgta tctgataata cagaccctgt cctttca 1587

<210> 466

<211> 437

<212> PRT

<213> Homo Sapien

<400> 466

Met	Ser	Ala	Val	Leu	Leu	Leu	Ala	Leu	Leu	Gly	Phe	Ile	Leu	Pro
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Leu	Pro	Gly	Val	Gln	Ala	Leu	Leu	Cys	Gln	Phe	Gly	Thr	Val	Gln
				20				25						30

His	Val	Trp	Lys	Val	Ser	Asp	Leu	Pro	Arg	Gln	Trp	Thr	Pro	Lys
				35				40						45

Asn	Thr	Ser	Cys	Asp	Ser	Gly	Leu	Gly	Cys	Gln	Asp	Thr	Leu	Met	
				50					55					60	
Leu	Ile	Glu	Ser	Gly	Pro	Gln	Val	Ser	Leu	Val	Leu	Ser	Lys	Gly	
				65					70					75	
Cys	Thr	Glu	Ala	Lys	Asp	Gln	Glu	Pro	Arg	Val	Thr	Glu	His	Arg	
				80					85					90	
Met	Gly	Pro	Gly	Leu	Ser	Leu	Ile	Ser	Tyr	Thr	Phe	Val	Cys	Arg	
				95					100					105	
Gln	Glu	Asp	Phe	Cys	Asn	Asn	Leu	Val	Asn	Ser	Leu	Pro	Leu	Trp	
				110					115					120	
Ala	Pro	Gln	Pro	Pro	Ala	Asp	Pro	Gly	Ser	Leu	Arg	Cys	Pro	Val	
				125					130					135	
Cys	Leu	Ser	Met	Glu	Gly	Cys	Leu	Glu	Gly	Thr	Thr	Glu	Glu	Ile	
				140					145					150	
Cys	Pro	Lys	Gly	Thr	Thr	His	Cys	Tyr	Asp	Gly	Leu	Leu	Arg	Leu	
				155					160					165	
Arg	Gly	Gly	Gly	Ile	Phe	Ser	Asn	Leu	Arg	Val	Gln	Gly	Cys	Met	
				170					175					180	
Pro	Gln	Pro	Gly	Cys	Asn	Leu	Leu	Asn	Gly	Thr	Gln	Glu	Ile	Gly	
				185					190					195	
Pro	Val	Gly	Met	Thr	Glu	Asn	Cys	Asn	Arg	Lys	Asp	Phe	Leu	Thr	
				200					205					210	
Cys	His	Arg	Gly	Thr	Thr	Ile	Met	Thr	His	Gly	Asn	Leu	Ala	Gln	
				215					220					225	
Glu	Pro	Thr	Asp	Trp	Thr	Thr	Ser	Asn	Thr	Glu	Met	Cys	Glu	Val	
				230					235					240	
Gly	Gln	Val	Cys	Gln	Glu	Thr	Leu	Leu	Leu	Ile	Asp	Val	Gly	Leu	
				245					250					255	
Thr	Ser	Thr	Leu	Val	Gly	Thr	Lys	Gly	Cys	Ser	Thr	Val	Gly	Ala	
				260					265					270	
Gln	Asn	Ser	Gln	Lys	Thr	Thr	Ile	His	Ser	Ala	Pro	Pro	Gly	Val	
				275					280					285	
Leu	Val	Ala	Ser	Tyr	Thr	His	Phe	Cys	Ser	Ser	Asp	Leu	Cys	Asn	
				290					295					300	
Ser	Ala	Ser	Ser	Ser	Ser	Val	Leu	Leu	Asn	Ser	Leu	Pro	Pro	Gln	
				305					310					315	
Ala	Ala	Pro	Val	Pro	Gly	Asp	Arg	Gln	Cys	Pro	Thr	Cys	Val	Gln	
				320					325					330	
Pro	Leu	Gly	Thr	Cys	Ser	Ser	Gly	Ser	Pro	Arg	Met	Thr	Cys	Pro	

	335		340		345
Arg Gly Ala Thr His Cys Tyr Asp Gly Tyr Ile His Leu Ser Gly					
	350		355		360
Gly Gly Leu Ser Thr Lys Met Ser Ile Gln Gly Cys Val Ala Gln					
	365		370		375
Pro Ser Ser Phe Leu Leu Asn His Thr Arg Gln Ile Gly Ile Phe					
	380		385		390
Ser Ala Arg Glu Lys Arg Asp Val Gln Pro Pro Ala Ser Gln His					
	395		400		405
Glu Gly Gly Gly Ala Glu Gly Leu Glu Ser Leu Thr Trp Gly Val					
	410		415		420
Gly Leu Ala Leu Ala Pro Ala Leu Trp Trp Gly Val Val Cys Pro					
	425		430		435

Ser Cys

<210> 467
 <211> 2475
 <212> DNA
 <213> Homo Sapien

<400> 467
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 gttccttgca gcttttctgc ccccgccgca gtgtaccag gaccagcca 200
 tggtgcatta catctaccag cgctttcgag tcttgagca agggctggaa 250
 aaatgtaccc aagcaacgag ggcatacatt caagaattcc aagagttctc 300
 aaaaaatata tctgtcatgc tgggaagatg tcagacctac acaagtgagt 350
 acaagagtgc agtgggtaac ttggcactga gagttgaacg tgcccaacgg 400
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 gataacacca agccagctcc ccggaagcaa atcctaacac tttcctggca 750

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<210> 468
<211> 402
<212> PRT
<213> Homo Sapien

<400> 468
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20 25 30
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35 40 45
Leu Glu Lys Cys Thr Gln Ala Thr Arg Ala Tyr Ile Gln Glu Phe
50 55 60
Gln Glu Phe Ser Lys Asn Ile Ser Val Met Leu Gly Arg Cys Gln
65 70 75
Thr Tyr Thr Ser Glu Tyr Lys Ser Ala Val Gly Asn Leu Ala Leu
80 85 90
Arg Val Glu Arg Ala Gln Arg Glu Ile Asp Tyr Ile Gln Tyr Leu
95 100 105
Arg Glu Ala Asp Glu Cys Ile Val Ser Glu Asp Lys Thr Leu Ala
110 115 120
Glu Met Leu Leu Gln Glu Ala Glu Glu Glu Lys Lys Ile Arg Thr
125 130 135
Leu Leu Asn Ala Ser Cys Asp Asn Met Leu Met Gly Ile Lys Ser
140 145 150
Leu Lys Ile Val Lys Lys Met Met Asp Thr His Gly Ser Trp Met
155 160 165
Lys Asp Ala Val Tyr Asn Ser Pro Lys Val Tyr Leu Leu Ile Gly
170 175 180
Ser Arg Asn Asn Thr Val Trp Glu Phe Ala Asn Ile Arg Ala Phe
185 190 195
Met Glu Asp Asn Thr Lys Pro Ala Pro Arg Lys Gln Ile Leu Thr

200	205	210
Leu Ser Trp Gln Gly Thr Gly Gln Val	Ile Tyr Lys Gly Phe Leu	
215	220	225
Phe Phe His Asn Gln Ala Thr Ser Asn	Glu Ile Ile Lys Tyr Asn	
230	235	240
Leu Gln Lys Arg Thr Val Glu Asp Arg	Met Leu Leu Pro Gly Gly	
245	250	255
Val Gly Arg Ala Leu Val Tyr Gln His	Ser Pro Ser Thr Tyr Ile	
260	265	270
Asp Leu Ala Val Asp Glu His Gly Leu	Trp Ala Ile His Ser Gly	
275	280	285
Pro Gly Thr His Ser His Leu Val Leu	Thr Lys Ile Glu Pro Gly	
290	295	300
Thr Leu Gly Val Glu His Ser Trp Asp	Thr Pro Cys Arg Ser Gln	
305	310	315
Asp Ala Glu Ala Ser Phe Leu Leu Cys	Gly Val Leu Tyr Val Val	
320	325	330
Tyr Ser Thr Gly Gly Gln Gly Pro His	Arg Ile Thr Cys Ile Tyr	
335	340	345
Asp Pro Leu Gly Thr Ile Ser Glu Glu	Asp Leu Pro Asn Leu Phe	
350	355	360
Phe Pro Lys Arg Pro Arg Ser His Ser	Met Ile His Tyr Asn Pro	
365	370	375
Arg Asp Lys Gln Leu Tyr Ala Trp Asn	Glu Gly Asn Gln Ile Ile	
380	385	390
Tyr Lys Leu Gln Thr Lys Arg Lys Leu	Pro Leu Lys	
395	400	

<210> 469
 <211> 1415
 <212> DNA
 <213> Homo Sapien

<400> 469
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 ctgtgccatc agcctgtggc ttcgagggct gcggatgtgc accccgctgg 250
 ggcgggaagg cgaggagtgc caccgccgca gccacaaggt ccccttcttc 300

Gln	Cys	Gly	Ala	Gly	Thr	Cys	Cys	Ala	Ile	Ser	Leu	Trp	Leu	Arg
				35					40					45
Gly	Leu	Arg	Met	Cys	Thr	Pro	Leu	Gly	Arg	Glu	Gly	Glu	Glu	Cys
				50					55					60
His	Pro	Gly	Ser	His	Lys	Val	Pro	Phe	Phe	Arg	Lys	Arg	Lys	His
				65					70					75
His	Thr	Cys	Pro	Cys	Leu	Pro	Asn	Leu	Leu	Cys	Ser	Arg	Phe	Pro
				80					85					90
Asp	Gly	Arg	Tyr	Arg	Cys	Ser	Met	Asp	Leu	Lys	Asn	Ile	Asn	Phe
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<210> 471

<211> 1281

<212> DNA

<213> Homo Sapien

<400> 471

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tactctcagt atggattatt aatgtatttt aatattctgt ttaggcccac 900
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<210> 472

<211> 229

<212> PRT

<213> Homo Sapien

<400> 472

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Ser	Ile	Gly	Ala	Gly	Ala	Leu	Gly	Ala	Ala	Ala	Leu	Ala	Leu	Leu
				20					25					30
Leu	Ala	Asn	Thr	Asp	Val	Phe	Leu	Ser	Lys	Pro	Gln	Lys	Ala	Ala
				35					40					45
Leu	Glu	Tyr	Leu	Glu	Asp	Ile	Asp	Leu	Lys	Thr	Leu	Glu	Lys	Glu
				50					55					60
Pro	Arg	Thr	Phe	Lys	Ala	Lys	Glu	Leu	Trp	Glu	Lys	Asn	Gly	Ala
				65					70					75
Val	Ile	Met	Ala	Val	Arg	Arg	Pro	Gly	Cys	Phe	Leu	Cys	Arg	Glu
				80					85					90
Glu	Ala	Ala	Asp	Leu	Ser	Ser	Leu	Lys	Ser	Met	Leu	Asp	Gln	Leu
				95					100					105
Gly	Val	Pro	Leu	Tyr	Ala	Val	Val	Lys	Glu	His	Ile	Arg	Thr	Glu
				110					115					120
Val	Lys	Asp	Phe	Gln	Pro	Tyr	Phe	Lys	Gly	Glu	Ile	Phe	Leu	Asp
				125					130					135
Glu	Lys	Lys	Lys	Phe	Tyr	Gly	Pro	Gln	Arg	Arg	Lys	Met	Met	Phe
				140					145					150
Met	Gly	Phe	Ile	Arg	Leu	Gly	Val	Trp	Tyr	Asn	Phe	Phe	Arg	Ala
				155					160					165
Trp	Asn	Gly	Gly	Phe	Ser	Gly	Asn	Leu	Glu	Gly	Glu	Gly	Phe	Ile
				170					175					180
Leu	Gly	Gly	Val	Phe	Val	Val	Gly	Ser	Gly	Lys	Gln	Gly	Ile	Leu
				185					190					195

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Ser Val Leu Glu Ala Ala Lys Met Ile Lys Pro Gln Thr Leu Ala
215 220 225

Ser Glu Lys Lys

<210> 473

<211> 713

<212> DNA

<213> Homo Sapien

<400> 473

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accaaagctg tcaaaaccac aggcaagggc atagttaaag gacggaatct 300

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agaaaaacac ttagattcaa tgattgtaaa ttaaggcaa atacacatat 400

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attataagta ccctatgcag ttggctggac agttctaaat tggactttat 500

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<210> 474

<211> 90

<212> PRT

<213> Homo Sapien

<400> 474

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20 25 30

Phe Leu Ser Arg Asn Lys Glu Asn His Ser Gln Pro Thr Gln Ser

	35		40		45									
Ser	Leu	Glu	Asp	Ser	Val	Thr	Pro	Thr	Lys	Ala	Val	Lys	Thr	Thr
				50					55					60
Gly	Lys	Gly	Ile	Val	Lys	Gly	Arg	Asn	Leu	Asp	Ser	Arg	Gly	Leu
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Ile	Leu	Gly	Ala	Glu	Ala	Trp	Gly	Arg	Gly	Val	Lys	Lys	Asn	Thr
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<210> 475
 <211> 1844
 <212> DNA
 <213> Homo Sapien

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 aaggctgaac gcagccaaga ccccttcgag aaatgcatgc aggatcctga 200
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<210> 476
 <211> 567
 <212> PRT
 <213> Homo Sapien

<400> 476
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 Asp Pro Phe Glu Lys Cys Met Gln Asp Pro Asp Tyr Glu Gln Leu
 35 40 45
 Leu Lys Val Val Thr Trp Gly Leu Asn Arg Thr Leu Lys Pro Gln
 50 55 60
 Arg Val Ile Val Val Gly Ala Gly Val Ala Gly Leu Val Ala Ala
 65 70 75
 Lys Val Leu Ser Asp Ala Gly His Lys Val Thr Ile Leu Glu Ala
 80 85 90
 Asp Asn Arg Ile Gly Gly Arg Ile Phe Thr Tyr Arg Asp Gln Asn
 95 100 105

Thr	Gly	Trp	Ile	Gly	Glu	Leu	Gly	Ala	Met	Arg	Met	Pro	Ser	Ser	
				110					115					120	
His	Arg	Ile	Leu	His	Lys	Leu	Cys	Gln	Gly	Leu	Gly	Leu	Asn	Leu	
				125					130					135	
Thr	Lys	Phe	Thr	Gln	Tyr	Asp	Lys	Asn	Thr	Trp	Thr	Glu	Val	His	
				140					145					150	
Glu	Val	Lys	Leu	Arg	Asn	Tyr	Val	Val	Glu	Lys	Val	Pro	Glu	Lys	
				155					160					165	
Leu	Gly	Tyr	Ala	Leu	Arg	Pro	Gln	Glu	Lys	Gly	His	Ser	Pro	Glu	
				170					175					180	
Asp	Ile	Tyr	Gln	Met	Ala	Leu	Asn	Gln	Ala	Leu	Lys	Asp	Leu	Lys	
				185					190					195	
Ala	Leu	Gly	Cys	Arg	Lys	Ala	Met	Lys	Lys	Phe	Glu	Arg	His	Thr	
				200					205					210	
Leu	Leu	Glu	Tyr	Leu	Leu	Gly	Glu	Gly	Asn	Leu	Ser	Arg	Pro	Ala	
				215					220					225	
Val	Gln	Leu	Leu	Gly	Asp	Val	Met	Ser	Glu	Asp	Gly	Phe	Phe	Tyr	
				230					235					240	
Leu	Ser	Phe	Ala	Glu	Ala	Leu	Arg	Ala	His	Ser	Cys	Leu	Ser	Asp	
				245					250					255	
Arg	Leu	Gln	Tyr	Ser	Arg	Ile	Val	Gly	Gly	Trp	Asp	Leu	Leu	Pro	
				260					265					270	
Arg	Ala	Leu	Leu	Ser	Ser	Leu	Ser	Gly	Leu	Val	Leu	Leu	Asn	Ala	
				275					280					285	
Pro	Val	Val	Ala	Met	Thr	Gln	Gly	Pro	His	Asp	Val	His	Val	Gln	
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Ile	Glu	Thr	Ser	Pro	Pro	Ala	Arg	Asn	Leu	Lys	Val	Leu	Lys	Ala	
				305					310					315	
Asp	Val	Val	Leu	Leu	Thr	Ala	Ser	Gly	Pro	Ala	Val	Lys	Arg	Ile	
				320					325					330	
Thr	Phe	Ser	Pro	Pro	Leu	Pro	Arg	His	Met	Gln	Glu	Ala	Leu	Arg	
				335					340					345	
Arg	Leu	His	Tyr	Val	Pro	Ala	Thr	Lys	Val	Phe	Leu	Ser	Phe	Arg	
				350					355					360	
Arg	Pro	Phe	Trp	Arg	Glu	Glu	His	Ile	Glu	Gly	Gly	His	Ser	Asn	
				365					370					375	
Thr	Asp	Arg	Pro	Ser	Arg	Met	Ile	Phe	Tyr	Pro	Pro	Pro	Arg	Glu	
				380					385					390	
Gly	Ala	Leu	Leu	Leu	Ala	Ser	Tyr	Thr	Trp	Ser	Asp	Ala	Ala	Ala	

Ala Phe Ala Gly Leu Ser Arg Glu Glu	Ala Leu Arg Leu Ala Leu
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Asp Asp Val Ala Ala Leu His Gly Pro	Val Val Arg Gln Leu Trp
425	430 435
Asp Gly Thr Gly Val Val Lys Arg Trp	Ala Glu Asp Gln His Ser
440	445 450
Gln Gly Gly Phe Val Val Gln Pro Pro	Ala Leu Trp Gln Thr Glu
455	460 465
Lys Asp Asp Trp Thr Val Pro Tyr Gly	Arg Ile Tyr Phe Ala Gly
470	475 480
Glu His Thr Ala Tyr Pro His Gly Trp	Val Glu Thr Ala Val Lys
485	490 495
Ser Ala Leu Arg Ala Ala Ile Lys Ile	Asn Ser Arg Lys Gly Pro
500	505 510
Ala Ser Asp Thr Ala Ser Pro Glu Gly	His Ala Ser Asp Met Glu
515	520 525
Gly Gln Gly His Val His Gly Val Ala	Ser Ser Pro Ser His Asp
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<210> 477
 <211> 3316
 <212> DNA
 <213> Homo Sapien

<400> 477
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 ccgtcttacc tcttcttgac ctgaacaatc agtctgtggg aattgaggga 400
 ggagcacgga aggggggtttc ccagaagaac aatgacctaa caagttgctg 450

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 <212> PRT
 <213> Homo Sapien

<400> 478

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				20					25					30
Gly	Ser	Pro	His	Ser	Leu	Glu	Ala	Leu	Arg	Asp	Ala	Ala	Pro	Ser
				35					40					45
Gln	Gly	Leu	Asn	Phe	Leu	Leu	Leu	Phe	Thr	Lys	Met	Leu	Phe	Ile
				50					55					60
Phe	Asn	Phe	Leu	Phe	Ser	Pro	Leu	Pro	Thr	Pro	Ala	Leu	Ile	Cys
				65					70					75
Ile	Leu	Thr	Phe	Gly	Ala	Ala	Ile	Phe	Leu	Trp	Leu	Ile	Thr	Arg
				80					85					90
Pro	Gln	Pro	Val	Leu	Pro	Leu	Leu	Asp	Leu	Asn	Asn	Gln	Ser	Val
				95					100					105
Gly	Ile	Glu	Gly	Gly	Ala	Arg	Lys	Gly	Val	Ser	Gln	Lys	Asn	Asn
				110					115					120
Asp	Leu	Thr	Ser	Cys	Cys	Phe	Ser	Asp	Ala	Lys	Thr	Met	Tyr	Glu
				125					130					135
Val	Phe	Gln	Arg	Gly	Leu	Ala	Val	Ser	Asp	Asn	Gly	Pro	Cys	Leu
				140					145					150
Gly	Tyr	Arg	Lys	Pro	Asn	Gln	Pro	Tyr	Arg	Trp	Leu	Ser	Tyr	Lys
				155					160					165
Gln	Val	Ser	Asp	Arg	Ala	Glu	Tyr	Leu	Gly	Ser	Cys	Leu	Leu	His
				170					175					180
Lys	Gly	Tyr	Lys	Ser	Ser	Pro	Asp	Gln	Phe	Val	Gly	Ile	Phe	Ala
				185					190					195
Gln	Asn	Arg	Pro	Glu	Trp	Ile	Ile	Ser	Glu	Leu	Ala	Cys	Tyr	Thr
				200					205					210
Tyr	Ser	Met	Val	Ala	Val	Pro	Leu	Tyr	Asp	Thr	Leu	Gly	Pro	Glu
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Ala	Ile	Val	His	Ile	Val	Asn	Lys	Ala	Asp	Ile	Ala	Met	Val	Ile
				230					235					240
Cys	Asp	Thr	Pro	Gln	Lys	Ala	Leu	Val	Leu	Ile	Gly	Asn	Val	Glu
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Lys	Gly	Phe	Thr	Pro	Ser	Leu	Lys	Val	Ile	Ile	Leu	Met	Asp	Pro



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Leu	Asp	Ser	Asp	Gly	Trp	Leu	His	Thr	Gly	Asp	Ile	Gly	Arg	Trp	
				575					580					585	
Leu	Pro	Asn	Gly	Thr	Leu	Lys	Ile	Ile	Asp	Arg	Lys	Lys	Asn	Ile	
				590					595					600	
Phe	Lys	Leu	Ala	Gln	Gly	Glu	Tyr	Ile	Ala	Pro	Glu	Lys	Ile	Glu	
				605					610					615	
Asn	Ile	Tyr	Asn	Arg	Ser	Gln	Pro	Val	Leu	Gln	Ile	Phe	Val	His	
				620					625					630	
Gly	Glu	Ser	Leu	Arg	Ser	Ser	Leu	Val	Gly	Val	Val	Val	Pro	Asp	
				635					640					645	
Thr	Asp	Val	Leu	Pro	Ser	Phe	Ala	Ala	Lys	Leu	Gly	Val	Lys	Gly	
				650					655					660	
Ser	Phe	Glu	Glu	Leu	Cys	Gln	Asn	Gln	Val	Val	Arg	Glu	Ala	Ile	
				665					670					675	
Leu	Glu	Asp	Leu	Gln	Lys	Ile	Gly	Lys	Glu	Ser	Gly	Leu	Lys	Thr	
				680					685					690	
Phe	Glu	Gln	Val	Lys	Ala	Ile	Phe	Leu	His	Pro	Glu	Pro	Phe	Ser	
				695					700					705	
Ile	Glu	Asn	Gly	Leu	Leu	Thr	Pro	Thr	Leu	Lys	Ala	Lys	Arg	Gly	
				710					715					720	
Glu	Leu	Ser	Lys	Tyr	Phe	Arg	Thr	Gln	Ile	Asp	Ser	Leu	Tyr	Glu	
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His	Ile	Gln	Asp												

<210> 479
<211> 2725
<212> DNA
<213> Homo Sapien

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cccctcatca agccctttgg ggctcggaag aagcggagct ggtaccttac 200
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aaaaaaaaa aaaaaaaaaa aaaaa 2725

<210> 480
<211> 660
<212> PRT
<213> Homo Sapien

<400> 480
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Asn Gln Arg Ala Leu Arg Arg Phe Cys Gln Thr Gly Ala Val Leu
35 40 45
Phe Leu Leu Val Thr Val Ile Val Asn Ile Lys Leu Ile Leu Asp
50 55 60
Thr Arg Arg Ala Ile Ser Glu Ala Asn Glu Asp Pro Glu Pro Glu
65 70 75

Gln	Asp	Tyr	Asp	Glu	Ala	Leu	Gly	Arg	Leu	Glu	Pro	Pro	Arg	Arg		80	85	90
Arg	Gly	Ser	Gly	Pro	Arg	Arg	Val	Leu	Asp	Val	Glu	Val	Tyr	Ser		95	100	105
Ser	Arg	Ser	Lys	Val	Tyr	Val	Ala	Val	Asp	Gly	Thr	Thr	Val	Leu		110	115	120
Glu	Asp	Glu	Ala	Arg	Glu	Gln	Gly	Arg	Gly	Ile	His	Val	Ile	Val		125	130	135
Leu	Asn	Gln	Ala	Thr	Gly	His	Val	Met	Ala	Lys	Arg	Val	Phe	Asp		140	145	150
Thr	Tyr	Ser	Pro	His	Glu	Asp	Glu	Ala	Met	Val	Leu	Phe	Leu	Asn		155	160	165
Met	Val	Ala	Pro	Gly	Arg	Val	Leu	Ile	Cys	Thr	Val	Lys	Asp	Glu		170	175	180
Gly	Ser	Phe	His	Leu	Lys	Asp	Thr	Ala	Lys	Ala	Leu	Leu	Arg	Ser		185	190	195
Leu	Gly	Ser	Gln	Ala	Gly	Pro	Ala	Leu	Gly	Trp	Arg	Asp	Thr	Trp		200	205	210
Ala	Phe	Val	Gly	Arg	Lys	Gly	Gly	Pro	Val	Phe	Gly	Glu	Lys	His		215	220	225
Ser	Lys	Ser	Pro	Ala	Leu	Ser	Ser	Trp	Gly	Asp	Pro	Val	Leu	Leu		230	235	240
Lys	Thr	Asp	Val	Pro	Leu	Ser	Ser	Ala	Glu	Glu	Ala	Glu	Cys	His		245	250	255
Trp	Ala	Asp	Thr	Glu	Leu	Asn	Arg	Arg	Arg	Arg	Arg	Phe	Cys	Ser		260	265	270
Lys	Val	Glu	Gly	Tyr	Gly	Ser	Val	Cys	Ser	Cys	Lys	Asp	Pro	Thr		275	280	285
Pro	Ile	Glu	Phe	Ser	Pro	Asp	Pro	Leu	Pro	Asp	Asn	Lys	Val	Leu		290	295	300
Asn	Val	Pro	Val	Ala	Val	Ile	Ala	Gly	Asn	Arg	Pro	Asn	Tyr	Leu		305	310	315
Tyr	Arg	Met	Leu	Arg	Ser	Leu	Leu	Ser	Ala	Gln	Gly	Val	Ser	Pro		320	325	330
Gln	Met	Ile	Thr	Val	Phe	Ile	Asp	Gly	Tyr	Tyr	Glu	Glu	Pro	Met		335	340	345
Asp	Val	Val	Ala	Leu	Phe	Gly	Leu	Arg	Gly	Ile	Gln	His	Thr	Pro		350	355	360
Ile	Ser	Ile	Lys	Asn	Ala	Arg	Val	Ser	Gln	His	Tyr	Lys	Ala	Ser				

				365					370					375	
Leu	Thr	Ala	Thr	Phe	Asn	Leu	Phe	Pro	Glu	Ala	Lys	Phe	Ala	Val	
				380					385					390	
Val	Leu	Glu	Glu	Asp	Leu	Asp	Ile	Ala	Val	Asp	Phe	Phe	Ser	Phe	
				395					400					405	
Leu	Ser	Gln	Ser	Ile	His	Leu	Leu	Glu	Glu	Asp	Asp	Ser	Leu	Tyr	
				410					415					420	
Cys	Ile	Ser	Ala	Trp	Asn	Asp	Gln	Gly	Tyr	Glu	His	Thr	Ala	Glu	
				425					430					435	
Asp	Pro	Ala	Leu	Leu	Tyr	Arg	Val	Glu	Thr	Met	Pro	Gly	Leu	Gly	
				440					445					450	
Trp	Val	Leu	Arg	Arg	Ser	Leu	Tyr	Lys	Glu	Glu	Leu	Glu	Pro	Lys	
				455					460					465	
Trp	Pro	Thr	Pro	Glu	Lys	Leu	Trp	Asp	Trp	Asp	Met	Trp	Met	Arg	
				470					475					480	
Met	Pro	Glu	Gln	Arg	Arg	Gly	Arg	Glu	Cys	Ile	Ile	Pro	Asp	Val	
				485					490					495	
Ser	Arg	Ser	Tyr	His	Phe	Gly	Ile	Val	Gly	Leu	Asn	Met	Asn	Gly	
				500					505					510	
Tyr	Phe	His	Glu	Ala	Tyr	Phe	Lys	Lys	His	Lys	Phe	Asn	Thr	Val	
				515					520					525	
Pro	Gly	Val	Gln	Leu	Arg	Asn	Val	Asp	Ser	Leu	Lys	Lys	Glu	Ala	
				530					535					540	
Tyr	Glu	Val	Glu	Val	His	Arg	Leu	Leu	Ser	Glu	Ala	Glu	Val	Leu	
				545					550					555	
Asp	His	Ser	Lys	Asn	Pro	Cys	Glu	Asp	Ser	Phe	Leu	Pro	Asp	Thr	
				560					565					570	
Glu	Gly	His	Thr	Tyr	Val	Ala	Phe	Ile	Arg	Met	Glu	Lys	Asp	Asp	
				575					580					585	
Asp	Phe	Thr	Thr	Trp	Thr	Gln	Leu	Ala	Lys	Cys	Leu	His	Ile	Trp	
				590					595					600	
Asp	Leu	Asp	Val	Arg	Gly	Asn	His	Arg	Gly	Leu	Trp	Arg	Leu	Phe	
				605					610					615	
Arg	Lys	Lys	Asn	His	Phe	Leu	Val	Val	Gly	Val	Pro	Ala	Ser	Pro	
				620					625					630	
Tyr	Ser	Val	Lys	Lys	Pro	Pro	Ser	Val	Thr	Pro	Ile	Phe	Leu	Glu	
				635					640					645	
Pro	Pro	Pro	Lys	Glu	Glu	Gly	Ala	Pro	Gly	Ala	Pro	Glu	Gln	Thr	
				650					655					660	

<210> 481
<211> 1346
<212> DNA
<213> Homo Sapien

<400> 481
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gaacagctct gggagataaa gcatatgcct gggataccaa tgaagaatac 150
ctcttcaaag cgatggtagc tttctccatg agaaaagttc ccaacagaga 200
agcaacagaa atttcccatg tctactttg caatgtaacc cagaggggtat 250
cattctgggtt tgtgggttaca gacccttcaa aaaatcacac ctttctgct 300
gttgaggtgc aatcagccat aagaatgaac aagaaccgga tcaacaatgc 350
cttcttttcta aatgaccaaa ctctggaatt tttaaaaatc ctttccacac 400
ttgcaccacc catggacca tctgtgcca tctggattat tatatttggt 450
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agtaataatc atctctttttt aaaaaaaaaa aaaaaaaaaa aaaaaa 1346

<210> 482

<211> 212

<212> PRT

<213> Homo Sapien

<400> 482

Met	Leu	Trp	Leu	Leu	Phe	Phe	Leu	Val	Thr	Ala	Ile	His	Ala	Glu
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Leu	Cys	Gln	Pro	Gly	Ala	Glu	Asn	Ala	Phe	Lys	Val	Arg	Leu	Ser
				20					25					30

Ile	Arg	Thr	Ala	Leu	Gly	Asp	Lys	Ala	Tyr	Ala	Trp	Asp	Thr	Asn
				35					40					45

Glu	Glu	Tyr	Leu	Phe	Lys	Ala	Met	Val	Ala	Phe	Ser	Met	Arg	Lys
				50					55					60

Val	Pro	Asn	Arg	Glu	Ala	Thr	Glu	Ile	Ser	His	Val	Leu	Leu	Cys
				65					70					75

Asn	Val	Thr	Gln	Arg	Val	Ser	Phe	Trp	Phe	Val	Val	Thr	Asp	Pro
				80					85					90

Ser	Lys	Asn	His	Thr	Leu	Pro	Ala	Val	Glu	Val	Gln	Ser	Ala	Ile
				95					100					105

Arg	Met	Asn	Lys	Asn	Arg	Ile	Asn	Asn	Ala	Phe	Phe	Leu	Asn	Asp
				110					115					120

Gln	Thr	Leu	Glu	Phe	Leu	Lys	Ile	Pro	Ser	Thr	Leu	Ala	Pro	Pro
				125					130					135

Met	Asp	Pro	Ser	Val	Pro	Ile	Trp	Ile	Ile	Ile	Phe	Gly	Val	Ile
				140					145					150

Phe	Cys	Ile	Ile	Ile	Val	Ala	Ile	Ala	Leu	Leu	Ile	Leu	Ser	Gly
				155					160					165

Ile	Trp	Gln	Arg	Arg	Arg	Lys	Asn	Lys	Glu	Pro	Ser	Glu	Val	Asp
				170					175					180

Asp	Ala	Glu	Asp	Lys	Cys	Glu	Asn	Met	Ile	Thr	Ile	Glu	Asn	Gly
				185					190					195

Ile	Pro	Ser	Asp	Pro	Leu	Asp	Met	Lys	Gly	Gly	Ile	Leu	Met	Met
				200					205					210

Pro Ser

<210> 483

<211> 2498

<212> DNA

<213> Homo Sapien

<400> 483

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<210> 484

<211> 263

<212> PRT

<213> Homo Sapien

<400> 484

Met	Arg	Pro	Gly	Ala	Pro	Gly	Pro	Leu	Trp	Pro	Leu	Pro	Trp	Gly
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Ala	Leu	Ala	Trp	Ala	Val	Gly	Phe	Val	Ser	Ser	Met	Gly	Ser	Gly
				20				25						30

Asn	Pro	Ala	Pro	Gly	Gly	Val	Cys	Trp	Leu	Gln	Gln	Gly	Gln	Glu
				35				40						45

Ala	Thr	Cys	Ser	Leu	Val	Leu	Gln	Thr	Asp	Val	Thr	Arg	Ala	Glu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

	50	55	60
Cys Cys Ala Ser Gly Asn Ile Asp Thr Ala Trp Ser Asn Leu Thr	65	70	75
His Pro Gly Asn Lys Ile Asn Leu Leu Gly Phe Leu Gly Leu Val	80	85	90
His Cys Leu Pro Cys Lys Asp Ser Cys Asp Gly Val Glu Cys Gly	95	100	105
Pro Gly Lys Ala Cys Arg Met Leu Gly Gly Arg Pro Arg Cys Glu	110	115	120
Cys Ala Pro Asp Cys Ser Gly Leu Pro Ala Arg Leu Gln Val Cys	125	130	135
Gly Ser Asp Gly Ala Thr Tyr Arg Asp Glu Cys Glu Leu Arg Ala	140	145	150
Ala Arg Cys Arg Gly His Pro Asp Leu Ser Val Met Tyr Arg Gly	155	160	165
Arg Cys Arg Lys Ser Cys Glu His Val Val Cys Pro Arg Pro Gln	170	175	180
Ser Cys Val Val Asp Gln Thr Gly Ser Ala His Cys Val Val Cys	185	190	195
Arg Ala Ala Pro Cys Pro Val Pro Ser Ser Pro Gly Gln Glu Leu	200	205	210
Cys Gly Asn Asn Asn Val Thr Tyr Ile Ser Ser Cys His Met Arg	215	220	225
Gln Ala Thr Cys Phe Leu Gly Arg Ser Ile Gly Val Arg His Ala	230	235	240
Gly Ser Cys Ala Gly Thr Pro Glu Glu Pro Pro Gly Gly Glu Ser	245	250	255
Ala Glu Glu Glu Glu Asn Phe Val	260		

<210> 485
 <211> 1429
 <212> DNA
 <213> Homo Sapien

<400> 485
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 ctgattttga gatgatgggc ttgggaaacg ggcgtcgcag catgaagtcg 150
 ccgccccctcg tgctggcgcg cctggtggcc tgcacatcg tcttgggctt 200

Leu	Val	Leu	Ala	Ala	Leu	Val	Ala	Cys	Ile	Ile	Val	Leu	Gly	Phe	
				20					25					30	
Asn	Tyr	Trp	Ile	Ala	Ser	Ser	Arg	Ser	Val	Asp	Leu	Gln	Thr	Arg	
				35					40					45	
Ile	Met	Glu	Leu	Glu	Gly	Arg	Val	Arg	Arg	Ala	Ala	Ala	Glu	Arg	
				50					55					60	
Gly	Ala	Val	Glu	Leu	Lys	Lys	Asn	Glu	Phe	Gln	Gly	Glu	Leu	Glu	
				65					70					75	
Lys	Gln	Arg	Glu	Gln	Leu	Asp	Lys	Ile	Gln	Ser	Ser	His	Asn	Phe	
				80					85					90	
Gln	Leu	Glu	Ser	Val	Asn	Lys	Leu	Tyr	Gln	Asp	Glu	Lys	Ala	Val	
				95					100					105	
Leu	Val	Asn	Asn	Ile	Thr	Thr	Gly	Glu	Arg	Leu	Ile	Arg	Val	Leu	
				110					115					120	
Gln	Asp	Gln	Leu	Lys	Thr	Leu	Gln	Arg	Asn	Tyr	Gly	Arg	Leu	Gln	
				125					130					135	
Gln	Asp	Val	Leu	Gln	Phe	Gln	Lys	Asn	Gln	Thr	Asn	Leu	Glu	Arg	
				140					145					150	
Lys	Phe	Ser	Tyr	Asp	Leu	Ser	Gln	Cys	Ile	Asn	Gln	Met	Lys	Glu	
				155					160					165	
Val	Lys	Glu	Gln	Cys	Glu	Glu	Arg	Ile	Glu	Glu	Val	Thr	Lys	Lys	
				170					175					180	
Gly	Asn	Glu	Ala	Val	Ala	Ser	Arg	Asp	Leu	Ser	Glu	Asn	Asn	Asp	
				185					190					195	
Gln	Arg	Gln	Gln	Leu	Gln	Ala	Leu	Ser	Glu	Pro	Gln	Pro	Arg	Leu	
				200					205					210	
Gln	Ala	Ala	Gly	Leu	Pro	His	Thr	Glu	Val	Pro	Gln	Gly	Lys	Gly	
				215					220					225	
Asn	Val	Leu	Gly	Asn	Ser	Lys	Ser	Gln	Thr	Pro	Ala	Pro	Ser	Ser	
				230					235					240	
Glu	Val	Val	Leu	Asp	Ser	Lys	Arg	Gln	Val	Glu	Lys	Glu	Glu	Thr	
				245					250					255	
Asn	Glu	Ile	Gln	Val	Val	Asn	Glu	Glu	Pro	Gln	Arg	Asp	Arg	Leu	
				260					265					270	
Pro	Gln	Glu	Pro	Gly	Arg	Glu	Gln	Val	Val	Glu	Asp	Arg	Pro	Val	
				275					280					285	
Gly	Gly	Arg	Gly	Phe	Gly	Gly	Ala	Gly	Glu	Leu	Gly	Gln	Thr	Pro	
				290					295					300	
Gln	Val	Gln	Ala	Ala	Leu	Ser	Val	Ser	Gln	Glu	Asn	Pro	Glu	Met	

305	310	315
Glu Gly Pro Glu Arg Asp Gln Leu Val	Ile Pro Asp Gly Gln Glu	
320	325	330
Glu Glu Gln Glu Ala Ala Gly Glu Gly	Arg Asn Gln Gln Lys Leu	
335	340	345
Arg Gly Glu Asp Asp Tyr Asn Met Asp	Glu Asn Glu Ala Glu Ser	
350	355	360
Glu Thr Asp Lys Gln Ala Ala Leu Ala	Gly Asn Asp Arg Asn Ile	
365	370	375
Asp Val Phe Asn Val Glu Asp Gln Lys	Arg Asp Thr Ile Asn Leu	
380	385	390
Leu Asp Gln Arg Glu Lys Arg Asn His	Thr Leu	
395	400	

<210> 487
 <211> 1371
 <212> DNA
 <213> Homo Sapien

<400> 487
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 ccacattctc aattaaaagg tgagctaagc ctctcggtg tttctgatta 1250
 acagtaaATc ctaaattcaa actgttaaAT gacattttta tttttatgtc 1300
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<210> 488
 <211> 215
 <212> PRT
 <213> Homo Sapien

<400> 488
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 Ile Gln Leu Thr Ala Leu Trp Pro Ile Ala Ala Val Glu Ile Tyr
 20 25 30
 Thr Ser Arg Val Leu Glu Ala Val Asn Gly Thr Asp Ala Arg Leu
 35 40 45
 Lys Cys Thr Phe Ser Ser Phe Ala Pro Val Gly Asp Ala Leu Thr
 50 55 60
 Val Thr Trp Asn Phe Arg Pro Leu Asp Gly Gly Pro Glu Gln Phe
 65 70 75
 Val Phe Tyr Tyr His Ile Asp Pro Phe Gln Pro Met Ser Gly Arg
 80 85 90
 Phe Lys Asp Arg Val Ser Trp Asp Gly Asn Pro Glu Arg Tyr Asp
 95 100 105
 Ala Ser Ile Leu Leu Trp Lys Leu Gln Phe Asp Asp Asn Gly Thr
 110 115 120
 Tyr Thr Cys Gln Val Lys Asn Pro Pro Asp Val Asp Gly Val Ile
 125 130 135
 Gly Glu Ile Arg Leu Ser Val Val His Thr Val Arg Phe Ser Glu

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Ile His Phe Leu	Ala Leu Ala Ile Gly Ser Ala Cys Ala Leu Met				
	155		160		165
Ile Ile Ile Val	Ile Val Val Val Leu Phe Gln His Tyr Arg Lys				
	170		175		180
Lys Arg Trp Ala	Glu Arg Ala His Lys Val Val Glu Ile Lys Ser				
	185		190		195
Lys Glu Glu Glu	Arg Leu Asn Gln Glu Lys Lys Val Ser Val Tyr				
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Leu Glu Asp Thr	Asp				
	215				

<210> 489
 <211> 2476
 <212> DNA
 <213> Homo Sapien

<400> 489
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 cttggcgctg gcggtactgg cccccggagc aggggagcag aggcggagag 200
 cagccaaagc gcccaatgtg gtgctggctg tgagcgactc cttcgatgga 250
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 atgttccttt aaataataga gaatataaaa tattgtaata atatgtatca 2350

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<210> 490
 <211> 536
 <212> PRT
 <213> Homo Sapien

<400> 490
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 20 25 30
 Ala Pro Asn Val Val Leu Val Val Ser Asp Ser Phe Asp Gly Arg
 35 40 45
 Leu Thr Phe His Pro Gly Ser Gln Val Val Lys Leu Pro Phe Ile
 50 55 60
 Asn Phe Met Lys Thr Arg Gly Thr Ser Phe Leu Asn Ala Tyr Thr
 65 70 75
 Asn Ser Pro Ile Cys Cys Pro Ser Arg Ala Ala Met Trp Ser Gly
 80 85 90
 Leu Phe Thr His Leu Thr Glu Ser Trp Asn Asn Phe Lys Gly Leu
 95 100 105
 Asp Pro Asn Tyr Thr Thr Trp Met Asp Val Met Glu Arg His Gly
 110 115 120
 Tyr Arg Thr Gln Lys Phe Gly Lys Leu Asp Tyr Thr Ser Gly His
 125 130 135
 His Ser Ile Ser Asn Arg Val Glu Ala Trp Thr Arg Asp Val Ala
 140 145 150
 Phe Leu Leu Arg Gln Glu Gly Arg Pro Met Val Asn Leu Ile Arg
 155 160 165
 Asn Arg Thr Lys Val Arg Val Met Glu Arg Asp Trp Gln Asn Thr
 170 175 180
 Asp Lys Ala Val Asn Trp Leu Arg Lys Glu Ala Ile Asn Tyr Thr
 185 190 195
 Glu Pro Phe Val Ile Tyr Leu Gly Leu Asn Leu Pro His Pro Tyr
 200 205 210
 Pro Ser Pro Ser Ser Gly Glu Asn Phe Gly Ser Ser Thr Phe His
 215 220 225
 Thr Ser Leu Tyr Trp Leu Glu Lys Val Ser His Asp Ala Ile Lys

				230					235					240
Ile	Pro	Lys	Trp	Ser 245	Pro	Leu	Ser	Glu	Met 250	His	Pro	Val	Asp	Tyr 255
Tyr	Ser	Ser	Tyr	Thr 260	Lys	Asn	Cys	Thr	Gly 265	Arg	Phe	Thr	Lys	Lys 270
Glu	Ile	Lys	Asn	Ile 275	Arg	Ala	Phe	Tyr	Tyr 280	Ala	Met	Cys	Ala	Glu 285
Thr	Asp	Ala	Met	Leu 290	Gly	Glu	Ile	Ile	Leu 295	Ala	Leu	His	Gln	Leu 300
Asp	Leu	Leu	Gln	Lys 305	Thr	Ile	Val	Ile	Tyr 310	Ser	Ser	Asp	His	Gly 315
Glu	Leu	Ala	Met	Glu 320	His	Arg	Gln	Phe	Tyr 325	Lys	Met	Ser	Met	Tyr 330
Glu	Ala	Ser	Ala	His 335	Val	Pro	Leu	Leu	Met 340	Met	Gly	Pro	Gly	Ile 345
Lys	Ala	Gly	Leu	Gln 350	Val	Ser	Asn	Val	Val 355	Ser	Leu	Val	Asp	Ile 360
Tyr	Pro	Thr	Met	Leu 365	Asp	Ile	Ala	Gly	Ile 370	Pro	Leu	Pro	Gln	Asn 375
Leu	Ser	Gly	Tyr	Ser 380	Leu	Leu	Pro	Leu	Ser 385	Ser	Glu	Thr	Phe	Lys 390
Asn	Glu	His	Lys	Val 395	Lys	Asn	Leu	His	Pro 400	Pro	Trp	Ile	Leu	Ser 405
Glu	Phe	His	Gly	Cys 410	Asn	Val	Asn	Ala	Ser 415	Thr	Tyr	Met	Leu	Arg 420
Thr	Asn	His	Trp	Lys 425	Tyr	Ile	Ala	Tyr	Ser 430	Asp	Gly	Ala	Ser	Ile 435
Leu	Pro	Gln	Leu	Phe 440	Asp	Leu	Ser	Ser	Asp 445	Pro	Asp	Glu	Leu	Thr 450
Asn	Val	Ala	Val	Lys 455	Phe	Pro	Glu	Ile	Thr 460	Tyr	Ser	Leu	Asp	Gln 465
Lys	Leu	His	Ser	Ile 470	Ile	Asn	Tyr	Pro	Lys 475	Val	Ser	Ala	Ser	Val 480
His	Gln	Tyr	Asn	Lys 485	Glu	Gln	Phe	Ile	Lys 490	Trp	Lys	Gln	Ser	Ile 495
Gly	Gln	Asn	Tyr	Ser 500	Asn	Val	Ile	Ala	Asn 505	Leu	Arg	Trp	His	Gln 510
Asp	Trp	Gln	Lys	Glu 515	Pro	Arg	Lys	Tyr	Glu 520	Asn	Ala	Ile	Asp	Gln 525

Trp Leu Lys Thr His Met Asn Pro Arg Ala Val
530 535

<210> 491
<211> 1475
<212> DNA
<213> Homo Sapien

<400> 491
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ctacatccta ggccttctgg ggcttttggg cacactgggt gccatgctgc 200
tccccagctg gaaaacaagt tcttatgtcg gtgccagcat tgtgacagca 250
gttggcttct ccaagggcct ctggatggaa tgtgccacac acagcacagg 300
catcaccag tgtgacatct atagcacct tctgggctg cccgctgaca 350
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gagaagcagt ggcttttgtg ggcattgctc taacctactt ctcaagcttc 1300
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gcagcctggg acatttaaaa aaata 1475

<210> 492
<211> 230
<212> PRT
<213> Homo Sapien

<400> 492
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Leu Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp
20 25 30
Lys Thr Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly
35 40 45
Phe Ser Lys Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly
50 55 60
Ile Thr Gln Cys Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala
65 70 75
Asp Ile Gln Ala Ala Gln Ala Met Met Val Thr Ser Ser Ala Ile
80 85 90
Ser Ser Leu Ala Cys Ile Ile Ser Val Val Gly Met Arg Cys Thr
95 100 105
Val Phe Cys Gln Glu Ser Arg Ala Lys Asp Arg Val Ala Val Ala
110 115 120
Gly Gly Val Phe Phe Ile Leu Gly Gly Leu Leu Gly Phe Ile Pro
125 130 135
Val Ala Trp Asn Leu His Gly Ile Leu Arg Asp Phe Tyr Ser Pro
140 145 150
Leu Val Pro Asp Ser Met Lys Phe Glu Ile Gly Glu Ala Leu Tyr
155 160 165
Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile Ala Gly Ile Ile
170 175 180
Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser Asn Tyr Tyr
185 190 195
Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser Pro Arg
200 205 210

Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr Ser
 215 220 225

Leu Thr Gly Tyr Val
 230

<210> 493
 <211> 610
 <212> DNA
 <213> Homo Sapien

<400> 493
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 aagtcacgcg tcccgcctggc tcagaacccat ggctgtgcca gccggcaccc 150
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 cgccatcgtg tccctgagcg agaccgcga atgtgggtccc cctgcacct 250
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 gattttgttg tgaagctgaa gggttcagggg gtgaattccc agtgccactc 350
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 acctgtaaaa 610

<210> 494
 <211> 119
 <212> PRT
 <213> Homo Sapien

<400> 494
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 20 25 30
 Pro Trp Leu Cys Gln Pro Ala Pro Arg Cys Gly Asp Lys Ile Tyr
 35 40 45
 Asn Pro Leu Glu Gln Cys Cys Tyr Asn Asp Ala Ile Val Ser Leu
 50 55 60
 Ser Glu Thr Arg Gln Cys Gly Pro Pro Cys Thr Phe Trp Pro Cys
 65 70 75

Phe Glu Leu Cys Cys Leu Asp Ser Phe Gly Leu Thr Asn Asp Phe
80 85 90

Val Val Lys Leu Lys Val Gln Gly Val Asn Ser Gln Cys His Ser
95 100 105

Ser Pro Ile Ser Ser Lys Cys Glu Ser Arg Arg Arg Phe Pro
110 115

<210> 495

<211> 771

<212> DNA

<213> Homo Sapien

<400> 495

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gctgtttggg ggccagagaa acacacactc aactgcccac ttcattctgt 500
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atctcaagtt ctcttctatc caggagcaaa gcacaggatc ataataaatt 750
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<210> 496

<211> 110

<212> PRT

<213> Homo Sapien

<400> 496

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Ile Ser Arg Leu Leu Cys Ser His Gly Ala Pro Val Ala Pro Met
20 25 30

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				35					40					45	
Lys	Phe	Tyr	Asp	Pro	Leu	Gln	His	Cys	Cys	Tyr	Asp	Asp	Ala	Val	
				50					55					60	
Val	Pro	Leu	Ala	Arg	Thr	Gln	Thr	Cys	Gly	Asn	Cys	Thr	Phe	Arg	
				65					70					75	
Val	Cys	Phe	Glu	Gln	Cys	Cys	Pro	Trp	Thr	Phe	Met	Val	Lys	Leu	
				80					85					90	
Ile	Asn	Gln	Asn	Cys	Asp	Ser	Ala	Arg	Thr	Ser	Asp	Asp	Arg	Leu	
				95					100					105	
Cys	Arg	Ser	Val	Ser											
				110											

<210> 497
 <211> 2089
 <212> DNA
 <213> Homo Sapien

<400> 497
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 ggccccagc cctcagtcgc cagagacccc agcccctcag aaccagacca 200
 gcagggtagt gcaggctccc agggaggaag aggaagatga gcaggaggcc 250
 agcgaggaga aggccggtga ggaagagaaa gcctggctga tggccagcag 300
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 aatcattaca ttaacaaaga gactcggggg aaaattccca aactgtttga 750
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 aagggaaatg gttgacccca tttgaccctg tcttcaccga agtcgacact 850

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cccagcagat gcctgaaacg gtggacagtg ctgaacctta tatatatttt 1650
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gtaagagatt aacaataata acaacattaa gtaaaatgag ttacttgaac 1750
gcaagcactg caataccata acagtcaaac tgattataga gaaggctact 1800
aagtgactca tgggcgagga gcatagacag tgtggagaca ttgggcaagg 1850
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cccactactc agaatggcat gctgcttaag acttttagat tgtttatttc 1950
tggaattttt catttaatgt ttttggacca tggttgacca tggttaactg 2000
agactgcaga aagcaaaacc atggataagg gaggactact acaaaagcat 2050
taaattgata catatttttt aaaaaaaaaa aaaaaaaaaa 2089

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<210> 498

<211> 444

<212> PRT

<213> Homo Sapien

<400> 498

Met	Lys	Val	Val	Pro	Ser	Leu	Leu	Leu	Ser	Val	Leu	Leu	Ala	Gln
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Val	Trp	Leu	Val	Pro	Gly	Leu	Ala	Pro	Ser	Pro	Gln	Ser	Pro	Glu	
				20					25					30	
Thr	Pro	Ala	Pro	Gln	Asn	Gln	Thr	Ser	Arg	Val	Val	Gln	Ala	Pro	
				35					40					45	
Arg	Glu	Glu	Glu	Glu	Asp	Glu	Gln	Glu	Ala	Ser	Glu	Glu	Lys	Ala	
				50					55					60	
Gly	Glu	Glu	Glu	Lys	Ala	Trp	Leu	Met	Ala	Ser	Arg	Gln	Gln	Leu	
				65					70					75	
Ala	Lys	Glu	Thr	Ser	Asn	Phe	Gly	Phe	Ser	Leu	Leu	Arg	Lys	Ile	
				80					85					90	
Ser	Met	Arg	His	Asp	Gly	Asn	Met	Val	Phe	Ser	Pro	Phe	Gly	Met	
				95					100					105	
Ser	Leu	Ala	Met	Thr	Gly	Leu	Met	Leu	Gly	Ala	Thr	Gly	Pro	Thr	
				110					115					120	
Glu	Thr	Gln	Ile	Lys	Arg	Gly	Leu	His	Leu	Gln	Ala	Leu	Lys	Pro	
				125					130					135	
Thr	Lys	Pro	Gly	Leu	Leu	Pro	Ser	Leu	Phe	Lys	Gly	Leu	Arg	Glu	
				140					145					150	
Thr	Leu	Ser	Arg	Asn	Leu	Glu	Leu	Gly	Leu	Ser	Gln	Gly	Ser	Phe	
				155					160					165	
Ala	Phe	Ile	His	Lys	Asp	Phe	Asp	Val	Lys	Glu	Thr	Phe	Phe	Asn	
				170					175					180	
Leu	Ser	Lys	Arg	Tyr	Phe	Asp	Thr	Glu	Cys	Val	Pro	Met	Asn	Phe	
				185					190					195	
Arg	Asn	Ala	Ser	Gln	Ala	Lys	Arg	Leu	Met	Asn	His	Tyr	Ile	Asn	
				200					205					210	
Lys	Glu	Thr	Arg	Gly	Lys	Ile	Pro	Lys	Leu	Phe	Asp	Glu	Ile	Asn	
				215					220					225	
Pro	Glu	Thr	Lys	Leu	Ile	Leu	Val	Asp	Tyr	Ile	Leu	Phe	Lys	Gly	
				230					235					240	
Lys	Trp	Leu	Thr	Pro	Phe	Asp	Pro	Val	Phe	Thr	Glu	Val	Asp	Thr	
				245					250					255	
Phe	His	Leu	Asp	Lys	Tyr	Lys	Thr	Ile	Lys	Val	Pro	Met	Met	Tyr	
				260					265					270	
Gly	Ala	Gly	Lys	Phe	Ala	Ser	Thr	Phe	Asp	Lys	Asn	Phe	Arg	Cys	
				275					280					285	
His	Val	Leu	Lys	Leu	Pro	Tyr	Gln	Gly	Asn	Ala	Thr	Met	Leu	Val	
				290					295					300	
Val	Leu	Met	Glu	Lys	Met	Gly	Asp	His	Leu	Ala	Leu	Glu	Asp	Tyr	

	305		310		315
Leu Thr Thr Asp	Leu Val Glu Thr Trp	Leu Arg Asn Met Lys Thr			
	320	325			330
Arg Asn Met Glu	Val Phe Phe Pro Lys	Phe Lys Leu Asp Gln Lys			
	335	340			345
Tyr Glu Met His	Glu Leu Leu Arg Gln	Met Gly Ile Arg Arg Ile			
	350	355			360
Phe Ser Pro Phe	Ala Asp Leu Ser Glu	Leu Ser Ala Thr Gly Arg			
	365	370			375
Asn Leu Gln Val	Ser Arg Val Leu Arg	Arg Thr Val Ile Glu Val			
	380	385			390
Asp Glu Arg Gly	Thr Glu Ala Val Ala	Gly Ile Leu Ser Glu Ile			
	395	400			405
Thr Ala Tyr Ser	Met Pro Pro Val Ile	Lys Val Asp Arg Pro Phe			
	410	415			420
His Phe Met Ile	Tyr Glu Glu Thr Ser	Gly Met Leu Leu Phe Leu			
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Gly Arg Val Val	Asn Pro Thr Leu Leu				
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<210> 499

<211> 693

<212> DNA

<213> Homo Sapien

<400> 499

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gtgagctgcc gtcgggtgag cacgtttccc ccaaaccctg gactgactgc 550
tttaagggtcc gcaaggcggg ccagggccga gacgcgagtc ggatgtggtg 600

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 693

<210> 500

<211> 93

<212> PRT

<213> Homo Sapien

<400> 500

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Ala Gly Ala Gly Val Gly Tyr Ala Leu Leu Val Ile Val Thr Pro
20 25 30

Gly Glu Arg Arg Lys Gln Glu Met Leu Lys Glu Met Pro Leu Gln
35 40 45

Asp Pro Arg Ser Arg Glu Glu Ala Ala Arg Thr Gln Gln Leu Leu
50 55 60

Leu Ala Thr Leu Gln Glu Ala Ala Thr Thr Gln Glu Asn Val Ala
65 70 75

Trp Arg Lys Asn Trp Met Val Gly Gly Glu Gly Gly Ala Ser Gly
80 85 90

Arg Ser Pro

<210> 501

<211> 1883

<212> DNA

<213> Homo Sapien

<400> 501

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atggtcggga cccctccaag gacagcagca ccaccttggt gagtacatgg 200

aacgccgact agctgcttta gaggaacggc tggcccagtg ccaggaccag 250

agtagtcggc atgctgctga gctgcgggac ttcaagaaca agatgctgcc 300

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 1883

<210> 502
<211> 406
<212> PRT
<213> Homo Sapien

<400> 502

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Ser	Gly	Pro	Leu	Gln	Gly	Gln	Gln	His	His	Leu	Val	Glu	Tyr	Met
				20					25					30
Glu	Arg	Arg	Leu	Ala	Ala	Leu	Glu	Glu	Arg	Leu	Ala	Gln	Cys	Gln
				35					40					45
Asp	Gln	Ser	Ser	Arg	His	Ala	Ala	Glu	Leu	Arg	Asp	Phe	Lys	Asn
				50					55					60
Lys	Met	Leu	Pro	Leu	Leu	Glu	Val	Ala	Glu	Lys	Glu	Arg	Glu	Ala
				65					70					75
Leu	Arg	Thr	Glu	Ala	Asp	Thr	Ile	Ser	Gly	Arg	Val	Asp	Arg	Leu
				80					85					90
Glu	Arg	Glu	Val	Asp	Tyr	Leu	Glu	Thr	Gln	Asn	Pro	Ala	Leu	Pro
				95					100					105
Cys	Val	Glu	Phe	Asp	Glu	Lys	Val	Thr	Gly	Gly	Pro	Gly	Thr	Lys
				110					115					120
Gly	Lys	Gly	Arg	Arg	Asn	Glu	Lys	Tyr	Asp	Met	Val	Thr	Asp	Cys
				125					130					135
Gly	Tyr	Thr	Ile	Ser	Gln	Val	Arg	Ser	Met	Lys	Ile	Leu	Lys	Arg
				140					145					150
Phe	Gly	Gly	Pro	Ala	Gly	Leu	Trp	Thr	Lys	Asp	Pro	Leu	Gly	Gln
				155					160					165
Thr	Glu	Lys	Ile	Tyr	Val	Leu	Asp	Gly	Thr	Gln	Asn	Asp	Thr	Ala
				170					175					180
Phe	Val	Phe	Pro	Arg	Leu	Arg	Asp	Phe	Thr	Leu	Ala	Met	Ala	Ala
				185					190					195
Arg	Lys	Ala	Ser	Arg	Val	Arg	Val	Pro	Phe	Pro	Trp	Val	Gly	Thr
				200					205					210
Gly	Gln	Leu	Val	Tyr	Gly	Gly	Phe	Leu	Tyr	Phe	Ala	Arg	Arg	Pro
				215					220					225
Pro	Gly	Arg	Pro	Gly	Gly	Gly	Gly	Glu	Met	Glu	Asn	Thr	Leu	Gln
				230					235					240
Leu	Ile	Lys	Phe	His	Leu	Ala	Asn	Arg	Thr	Val	Val	Asp	Ser	Ser
				245					250					255
Val	Phe	Pro	Ala	Glu	Gly	Leu	Ile	Pro	Pro	Tyr	Gly	Leu	Thr	Ala
				260					265					270
Asp	Thr	Tyr	Ile	Asp	Leu	Val	Ala	Asp	Glu	Glu	Gly	Leu	Trp	Ala
				275					280					285

Val	Tyr	Ala	Thr	Arg	Glu	Asp	Asp	Arg	His	Leu	Cys	Leu	Ala	Lys
				290					295					300
Leu	Asp	Pro	Gln	Thr	Leu	Asp	Thr	Glu	Gln	Gln	Trp	Asp	Thr	Pro
				305					310					315
Cys	Pro	Arg	Glu	Asn	Ala	Glu	Ala	Ala	Phe	Val	Ile	Cys	Gly	Thr
				320					325					330
Leu	Tyr	Val	Val	Tyr	Asn	Thr	Arg	Pro	Ala	Ser	Arg	Ala	Arg	Ile
				335					340					345
Gln	Cys	Ser	Phe	Asp	Ala	Ser	Gly	Thr	Leu	Thr	Pro	Glu	Arg	Ala
				350					355					360
Ala	Leu	Pro	Tyr	Phe	Pro	Arg	Arg	Tyr	Gly	Ala	His	Ala	Ser	Leu
				365					370					375
Arg	Tyr	Asn	Pro	Arg	Glu	Arg	Gln	Leu	Tyr	Ala	Trp	Asp	Asp	Gly
				380					385					390
Tyr	Gln	Ile	Val	Tyr	Lys	Leu	Glu	Met	Arg	Lys	Lys	Glu	Glu	Glu
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<210> 503
 <211> 689
 <212> DNA
 <213> Homo Sapien

<400> 503
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 ctggaccctg agcagcttct tgggccctgg tacgtgcttg cgggtggcctc 150
 ccgggaaaag ggctttgcca tggagaagga catgaagaac gtcgtggggg 200
 tgggtggtgac cctcactcca gaaaacaacc tgcggacgct gtcctctcag 250
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gggcccagca ccagctcaga ataaagcgat tccacagca 689

<210> 504

<211> 163

<212> PRT

<213> Homo Sapien

<400> 504

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Pro Arg Ala Gln Ala Val Trp Leu Gly Arg Leu Asp Pro Glu Gln
20 25 30

Leu Leu Gly Pro Trp Tyr Val Leu Ala Val Ala Ser Arg Glu Lys
35 40 45

Gly Phe Ala Met Glu Lys Asp Met Lys Asn Val Val Gly Val Val
50 55 60

Val Thr Leu Thr Pro Glu Asn Asn Leu Arg Thr Leu Ser Ser Gln
65 70 75

His Gly Leu Gly Gly Cys Asp Gln Ser Val Met Asp Leu Ile Lys
80 85 90

Arg Asn Ser Gly Trp Val Phe Glu Asn Pro Ser Ile Gly Val Leu
95 100 105

Glu Leu Trp Val Leu Ala Thr Asn Phe Arg Asp Tyr Ala Ile Ile
110 115 120

Phe Thr Gln Leu Glu Phe Gly Asp Glu Pro Phe Asn Thr Val Glu
125 130 135

Leu Tyr Ser Leu Thr Glu Thr Ala Ser Gln Glu Ala Met Gly Leu
140 145 150

Phe Thr Lys Trp Ser Arg Ser Leu Gly Phe Leu Ser Gln
155 160

<210> 505

<211> 1204

<212> DNA

<213> Homo Sapien

<400> 505

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aggccatgag gattctgcag ttaatcctgc ttgctctggc aacagggctt 150

gtagggggag agaccaggat catcaagggg ttcgagtgc agcctcactc 200

ccagccctgg caggcagccc tggtcgagaa gacgcggcta ctctgtgggg 250

cgacgctcat cgccccaga tggctcctga cagcagccca ctgcctcaag 300

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ccccgctaca tagttcacct ggggcagcac aacctccaga aggaggaggg 350
ctgtgagcag acccggacag ccactgagtc cttccccac cccggcttca 400
acaacagcct cccaacaaa gaccacgca atgacatcat gctggggaag 450
atggcatcgc cagtctccat cacctgggct gtgcgacccc tcaccctctc 500
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<210> 506
<211> 250
<212> PRT
<213> Homo Sapien

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<400> 506
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Val Gly Gly Glu Thr Arg Ile Ile Lys Gly Phe Glu Cys Lys Pro
          20             25             30

His Ser Gln Pro Trp Gln Ala Ala Leu Phe Glu Lys Thr Arg Leu
          35             40             45

Leu Cys Gly Ala Thr Leu Ile Ala Pro Arg Trp Leu Leu Thr Ala
          50             55             60

Ala His Cys Leu Lys Pro Arg Tyr Ile Val His Leu Gly Gln His
          65             70             75

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Asn	Leu	Gln	Lys	Glu	Glu	Gly	Cys	Glu	Gln	Thr	Arg	Thr	Ala	Thr
				80					85					90
Glu	Ser	Phe	Pro	His	Pro	Gly	Phe	Asn	Asn	Ser	Leu	Pro	Asn	Lys
				95					100					105
Asp	His	Arg	Asn	Asp	Ile	Met	Leu	Val	Lys	Met	Ala	Ser	Pro	Val
				110					115					120
Ser	Ile	Thr	Trp	Ala	Val	Arg	Pro	Leu	Thr	Leu	Ser	Ser	Arg	Cys
				125					130					135
Val	Thr	Ala	Gly	Thr	Ser	Cys	Leu	Ile	Ser	Gly	Trp	Gly	Ser	Thr
				140					145					150
Ser	Ser	Pro	Gln	Leu	Arg	Leu	Pro	His	Thr	Leu	Arg	Cys	Ala	Asn
				155					160					165
Ile	Thr	Ile	Ile	Glu	His	Gln	Lys	Cys	Glu	Asn	Ala	Tyr	Pro	Gly
				170					175					180
Asn	Ile	Thr	Asp	Thr	Met	Val	Cys	Ala	Ser	Val	Gln	Glu	Gly	Gly
				185					190					195
Lys	Asp	Ser	Cys	Gln	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Val	Cys	Asn
				200					205					210
Gln	Ser	Leu	Gln	Gly	Ile	Ile	Ser	Trp	Gly	Gln	Asp	Pro	Cys	Ala
				215					220					225
Ile	Thr	Arg	Lys	Pro	Gly	Val	Tyr	Thr	Lys	Val	Cys	Lys	Tyr	Val
				230					235					240
Asp	Trp	Ile	Gln	Glu	Thr	Met	Lys	Asn	Asn					
				245					250					

<210> 507
 <211> 636
 <212> DNA
 <213> Homo Sapien

<400> 507
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 aggggccccca tccttccagg caccaaggcc tggatggaga ccgaggacac 350
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 ccacccccag tagggctcca ggggccatca ctgccccgcg cctgtcccaa 550
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 aataaacccc agcaggcaaa aaaaaaaaaa aaaaaa 636

<210> 508
 <211> 151
 <212> PRT
 <213> Homo Sapien

<400> 508
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 Gln Val Lys His Trp Pro Ser Glu Gln Asp Pro Glu Lys Ala Trp
 35 40 45
 Gly Ala Arg Val Val Glu Pro Pro Glu Lys Asp Asp Gln Leu Val
 50 55 60
 Val Leu Phe Pro Val Gln Lys Pro Lys Leu Leu Thr Thr Glu Glu
 65 70 75
 Lys Pro Arg Gly Gln Gly Arg Gly Pro Ile Leu Pro Gly Thr Lys
 80 85 90
 Ala Trp Met Glu Thr Glu Asp Thr Leu Gly Arg Val Leu Ser Pro
 95 100 105
 Glu Pro Asp His Asp Ser Leu Tyr His Pro Pro Pro Glu Glu Asp
 110 115 120
 Gln Gly Glu Glu Arg Pro Arg Leu Trp Val Met Pro Asn His Gln
 125 130 135
 Val Leu Leu Gly Pro Glu Glu Asp Gln Asp His Ile Tyr His Pro
 140 145 150

Gln

<210> 509
 <211> 1281
 <212> DNA
 <213> Homo Sapien

<400> 509
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 cggtctgggag cccacgaggc tgccgcatcc tgccctcgga acaatgggac 100

	20		25		30
Ala Met Ala Ala Ser Ala Asn Ile Glu Asn Ser Gly Leu Pro His					
	35		40		45
Asn Ser Ser Ala Asn Ser Thr Glu Thr Leu Gln His Val Pro Ser					
	50		55		60
Asp His Thr Asn Glu Thr Ser Asn Ser Thr Val Lys Pro Pro Thr					
	65		70		75
Ser Val Ala Ser Asp Ser Ser Asn Thr Thr Val Thr Thr Met Lys					
	80		85		90
Pro Thr Ala Ala Ser Asn Thr Thr Thr Pro Gly Met Val Ser Thr					
	95		100		105
Asn Met Thr Ser Thr Thr Leu Lys Ser Thr Pro Lys Thr Thr Ser					
	110		115		120
Val Ser Gln Asn Thr Ser Gln Ile Ser Thr Ser Thr Met Thr Val					
	125		130		135
Thr His Asn Ser Ser Val Thr Ser Ala Ala Ser Ser Val Thr Ile					
	140		145		150
Thr Thr Thr Met His Ser Glu Ala Lys Lys Gly Ser Lys Phe Asp					
	155		160		165
Thr Gly Ser Phe Val Gly Gly Ile Val Leu Thr Leu Gly Val Leu					
	170		175		180
Ser Ile Leu Tyr Ile Gly Cys Lys Met Tyr Tyr Ser Arg Arg Gly					
	185		190		195
Ile Arg Tyr Arg Thr Ile Asp Glu His Asp Ala Ile Ile					
	200		205		

<210> 511
 <211> 2668
 <212> DNA
 <213> Homo Sapien

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 ctcagcaagc cagcatggct aggatgagct ttgttatagc agcttgccaa 150
 ttggtgctgg gcctactaat gacttcatta accgagtctt ccatacagaa 200
 tagtgagtgt ccacaacttt gcgtatgtga aattcgtccc tggtttacc 250
 cacagtcaac ttacagagaa gccaccactg ttgattgcaa tgacctccgc 300
 ttaacaagga ttcccagtaa cctctctagt gacacacaag tgcttctctt 350

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<210> 512
<211> 716
<212> PRT
<213> Homo Sapien

<400> 512
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Glu Cys Pro Gln Leu Cys Val Cys Glu Ile Arg Pro Trp Phe Thr
35 40 45
Pro Gln Ser Thr Tyr Arg Glu Ala Thr Thr Val Asp Cys Asn Asp
50 55 60
Leu Arg Leu Thr Arg Ile Pro Ser Asn Leu Ser Ser Asp Thr Gln
65 70 75
Val Leu Leu Leu Gln Ser Asn Asn Ile Ala Lys Thr Val Asp Glu

Asp	Cys	Val	Ile	His	Trp	Ile	Asn	Ser	Asn	Lys	Thr	Asn	Ile	Arg
				380					385					390
Phe	Met	Glu	Pro	Leu	Ser	Met	Phe	Cys	Ala	Met	Pro	Pro	Glu	Tyr
				395					400					405
Lys	Gly	His	Gln	Val	Lys	Glu	Val	Leu	Ile	Gln	Asp	Ser	Ser	Glu
				410					415					420
Gln	Cys	Leu	Pro	Met	Ile	Ser	His	Asp	Ser	Phe	Pro	Asn	Arg	Leu
				425					430					435
Asn	Val	Asp	Ile	Gly	Thr	Thr	Val	Phe	Leu	Asp	Cys	Arg	Ala	Met
				440					445					450
Ala	Glu	Pro	Glu	Pro	Glu	Ile	Tyr	Trp	Val	Thr	Pro	Ile	Gly	Asn
				455					460					465
Lys	Ile	Thr	Val	Glu	Thr	Leu	Ser	Asp	Lys	Tyr	Lys	Leu	Ser	Ser
				470					475					480
Glu	Gly	Thr	Leu	Glu	Ile	Ser	Asn	Ile	Gln	Ile	Glu	Asp	Ser	Gly
				485					490					495
Arg	Tyr	Thr	Cys	Val	Ala	Gln	Asn	Val	Gln	Gly	Ala	Asp	Thr	Arg
				500					505					510
Val	Ala	Thr	Ile	Lys	Val	Asn	Gly	Thr	Leu	Leu	Asp	Gly	Thr	Gln
				515					520					525
Val	Leu	Lys	Ile	Tyr	Val	Lys	Gln	Thr	Glu	Ser	His	Ser	Ile	Leu
				530					535					540
Val	Ser	Trp	Lys	Val	Asn	Ser	Asn	Val	Met	Thr	Ser	Asn	Leu	Lys
				545					550					555
Trp	Ser	Ser	Ala	Thr	Met	Lys	Ile	Asp	Asn	Pro	His	Ile	Thr	Tyr
				560					565					570
Thr	Ala	Arg	Val	Pro	Val	Asp	Val	His	Glu	Tyr	Asn	Leu	Thr	His
				575					580					585
Leu	Gln	Pro	Ser	Thr	Asp	Tyr	Glu	Val	Cys	Leu	Thr	Val	Ser	Asn
				590					595					600
Ile	His	Gln	Gln	Thr	Gln	Lys	Ser	Cys	Val	Asn	Val	Thr	Thr	Lys
				605					610					615
Asn	Ala	Ala	Phe	Ala	Val	Asp	Ile	Ser	Asp	Gln	Glu	Thr	Ser	Thr
				620					625					630
Ala	Leu	Ala	Ala	Val	Met	Gly	Ser	Met	Phe	Ala	Val	Ile	Ser	Leu
				635					640					645
Ala	Ser	Ile	Ala	Val	Tyr	Phe	Ala	Lys	Arg	Phe	Lys	Arg	Lys	Asn
				650					655					660
Tyr	His	His	Ser	Leu	Lys	Lys	Tyr	Met	Gln	Lys	Thr	Ser	Ser	Ile

				665					670					675
Pro	Leu	Asn	Glu	Leu	Tyr	Pro	Pro	Leu	Ile	Asn	Leu	Trp	Glu	Gly
				680					685					690
Asp	Ser	Glu	Lys	Asp	Lys	Asp	Gly	Ser	Ala	Asp	Thr	Lys	Pro	Thr
				695					700					705
Gln	Val	Asp	Thr	Ser	Arg	Ser	Tyr	Tyr	Met	Trp				
				710					715					

<210> 513
 <211> 957
 <212> DNA
 <213> Homo Sapien

<400> 513
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 cccattgag aaggtcattg aagggatcaa ccgagggctg agcaatgcag 200
 agagagaggt gggcaaggcc ctggatggca tcaacagtgg aatcacgcat 250
 gccggaaggg aagtggagaa ggttttcaac ggacttagca acatggggag 300
 ccacaccggc aaggagttag acaaaggcgt ccaggggctc aaccacggca 350
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 ccagcaagga ggccaaccag ctgctgaatg gcaaccatca aagcggatct 700
 tccagccatc aaggaggggc cacaaccacg ccgttagcct ctggggcctc 750
 agtcaacacg cttttcatca accttcccgc cctgtggagg agcgtcgcca 800
 acatcatgcc ctaaactggc atccggcctt gctgggagaa taatgtcgcc 850
 gttgtcacat cagctgacat gacctggagg ggttgggggt gggggacagg 900
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 tacacca 957

<210> 514

<211> 247
 <212> PRT
 <213> Homo Sapien

<400> 514

Met	His	Leu	Ala	Arg	Leu	Val	Gly	Ser	Cys	Ser	Leu	Leu	Leu	Leu	1	5	10	15
Leu	Gly	Ala	Leu	Ser	Gly	Trp	Ala	Ala	Ser	Asp	Asp	Pro	Ile	Glu	20	25	30	
Lys	Val	Ile	Glu	Gly	Ile	Asn	Arg	Gly	Leu	Ser	Asn	Ala	Glu	Arg	35	40	45	
Glu	Val	Gly	Lys	Ala	Leu	Asp	Gly	Ile	Asn	Ser	Gly	Ile	Thr	His	50	55	60	
Ala	Gly	Arg	Glu	Val	Glu	Lys	Val	Phe	Asn	Gly	Leu	Ser	Asn	Met	65	70	75	
Gly	Ser	His	Thr	Gly	Lys	Glu	Leu	Asp	Lys	Gly	Val	Gln	Gly	Leu	80	85	90	
Asn	His	Gly	Met	Asp	Lys	Val	Ala	His	Glu	Ile	Asn	His	Gly	Ile	95	100	105	
Gly	Gln	Ala	Gly	Lys	Glu	Ala	Glu	Lys	Leu	Gly	His	Gly	Val	Asn	110	115	120	
Asn	Ala	Ala	Gly	Gln	Ala	Gly	Lys	Glu	Ala	Asp	Lys	Ala	Val	Gln	125	130	135	
Gly	Phe	His	Thr	Gly	Val	His	Gln	Ala	Gly	Lys	Glu	Ala	Glu	Lys	140	145	150	
Leu	Gly	Gln	Gly	Val	Asn	His	Ala	Ala	Asp	Gln	Ala	Gly	Lys	Glu	155	160	165	
Val	Glu	Lys	Leu	Gly	Gln	Gly	Ala	His	His	Ala	Ala	Gly	Gln	Ala	170	175	180	
Gly	Lys	Glu	Leu	Gln	Asn	Ala	His	Asn	Gly	Val	Asn	Gln	Ala	Ser	185	190	195	
Lys	Glu	Ala	Asn	Gln	Leu	Leu	Asn	Gly	Asn	His	Gln	Ser	Gly	Ser	200	205	210	
Ser	Ser	His	Gln	Gly	Gly	Ala	Thr	Thr	Thr	Pro	Leu	Ala	Ser	Gly	215	220	225	
Ala	Ser	Val	Asn	Thr	Pro	Phe	Ile	Asn	Leu	Pro	Ala	Leu	Trp	Arg	230	235	240	
Ser	Val	Ala	Asn	Ile	Met	Pro	245											

<210> 515
 <211> 1942

<212> DNA
<213> Homo Sapien

<400> 515

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 aaaatgggtcc aaactgcttt gcagaaaccg cggatgatccc tgctggcaga 1450
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<210> 516
 <211> 325
 <212> PRT
 <213> Homo Sapien

<400> 516
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 35 40 45
 Glu Lys Arg Glu His Ala Thr Arg Asp Gly Pro Gly Arg Val Asn
 50 55 60
 Glu Leu Gly Arg Pro Ala Arg Asp Glu Gly Gly Ser Gly Arg Asp
 65 70 75
 Trp Lys Ser Lys Ser Gly Arg Gly Leu Ala Gly Arg Glu Pro Trp
 80 85 90
 Ser Lys Leu Lys Gln Ala Trp Val Ser Gln Gly Gly Gly Ala Lys
 95 100 105
 Ala Gly Asp Leu Gln Val Arg Pro Arg Gly Asp Thr Pro Gln Ala
 110 115 120
 Glu Ala Leu Ala Ala Ala Ala Gln Asp Ala Ile Gly Pro Glu Leu
 125 130 135
 Ala Pro Thr Pro Glu Pro Pro Glu Glu Tyr Val Tyr Pro Asp Tyr

tcaaaattta aggagctagt tacacatgga gacgcttcaa ctgagaatga 400
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 tggtcgatca aaccaaacaa tgtttccatt gttttgcatg cagaggaacc 550
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 ccatatgtta cctcatataa gtcacctgtc accacttttag ataagagcac 700
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<210> 518
 <211> 350
 <212> PRT
 <213> Homo Sapien

<400> 518
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 20 25 30
 Gln Asn Leu Asn His Tyr Ile Gln Val Leu Glu Asn Leu Val Arg
 35 40 45

Ser	Val	Pro	Ser	Gly 50	Glu	Pro	Gly	Arg	Glu 55	Lys	Lys	Ser	Asn	Ser 60
Pro	Lys	His	Val	Tyr 65	Ser	Ile	Ala	Ser	Lys 70	Gly	Ser	Lys	Phe	Lys 75
Glu	Leu	Val	Thr	His 80	Gly	Asp	Ala	Ser	Thr 85	Glu	Asn	Asp	Val	Leu 90
Thr	Asn	Pro	Ile	Ser 95	Glu	Glu	Thr	Thr	Thr 100	Phe	Pro	Thr	Gly	Gly 105
Phe	Thr	Pro	Glu	Ile 110	Gly	Lys	Lys	Lys	His 115	Thr	Glu	Ser	Thr	Pro 120
Phe	Trp	Ser	Ile	Lys 125	Pro	Asn	Asn	Val	Ser 130	Ile	Val	Leu	His	Ala 135
Glu	Glu	Pro	Tyr	Ile 140	Glu	Asn	Glu	Glu	Pro 145	Glu	Pro	Glu	Pro	Glu 150
Pro	Ala	Ala	Lys	Gln 155	Thr	Glu	Ala	Pro	Arg 160	Met	Leu	Pro	Val	Val 165
Thr	Glu	Ser	Ser	Thr 170	Ser	Pro	Tyr	Val	Thr 175	Ser	Tyr	Lys	Ser	Pro 180
Val	Thr	Thr	Leu	Asp 185	Lys	Ser	Thr	Gly	Ile 190	Glu	Ile	Ser	Thr	Glu 195
Ser	Glu	Asp	Val	Pro 200	Gln	Leu	Ser	Gly	Glu 205	Thr	Ala	Ile	Glu	Lys 210
Pro	Glu	Glu	Phe	Gly 215	Lys	His	Pro	Glu	Ser 220	Trp	Asn	Asn	Asp	Asp 225
Ile	Leu	Lys	Lys	Ile 230	Leu	Asp	Ile	Asn	Ser 235	Gln	Val	Gln	Gln	Ala 240
Leu	Leu	Ser	Asp	Thr 245	Ser	Asn	Pro	Ala	Tyr 250	Arg	Glu	Asp	Ile	Glu 255
Ala	Ser	Lys	Asp	His 260	Leu	Lys	Arg	Ser	Leu 265	Ala	Leu	Ala	Ala	Ala 270
Ala	Glu	His	Lys	Leu 275	Lys	Thr	Met	Tyr	Lys 280	Ser	Gln	Leu	Leu	Pro 285
Val	Gly	Arg	Thr	Ser 290	Asn	Lys	Ile	Asp	Asp 295	Ile	Glu	Thr	Val	Ile 300
Asn	Met	Leu	Cys	Asn 305	Ser	Arg	Ser	Lys	Leu 310	Tyr	Glu	Tyr	Leu	Asp 315
Ile	Lys	Cys	Val	Pro 320	Pro	Glu	Met	Arg	Glu 325	Lys	Ala	Ala	Thr	Val 330
Phe	Asn	Thr	Leu	Lys	Asn	Met	Cys	Arg	Ser	Arg	Arg	Val	Thr	Ala

335

340

345

Leu Leu Lys Val Tyr
350

<210> 519

<211> 1630

<212> DNA

<213> Homo Sapien

<400> 519

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<210> 520

<211> 394

<212> PRT

<213> Homo Sapien

<400> 520

Met	Phe	Cys	Pro	Leu	Lys	Leu	Ile	Leu	Leu	Pro	Val	Leu	Leu	Asp	1	5	10	15
Tyr	Ser	Leu	Gly	Leu	Asn	Asp	Leu	Asn	Val	Ser	Pro	Pro	Glu	Leu	20	25	30	
Thr	Val	His	Val	Gly	Asp	Ser	Ala	Leu	Met	Gly	Cys	Val	Phe	Gln	35	40	45	
Ser	Thr	Glu	Asp	Lys	Cys	Ile	Phe	Lys	Ile	Asp	Trp	Thr	Leu	Ser	50	55	60	
Pro	Gly	Glu	His	Ala	Lys	Asp	Glu	Tyr	Val	Leu	Tyr	Tyr	Tyr	Ser	65	70	75	
Asn	Leu	Ser	Val	Pro	Ile	Gly	Arg	Phe	Gln	Asn	Arg	Val	His	Leu	80	85	90	
Met	Gly	Asp	Ile	Leu	Cys	Asn	Asp	Gly	Ser	Leu	Leu	Leu	Gln	Asp	95	100	105	
Val	Gln	Glu	Ala	Asp	Gln	Gly	Thr	Tyr	Ile	Cys	Glu	Ile	Arg	Leu	110	115	120	
Lys	Gly	Glu	Ser	Gln	Val	Phe	Lys	Lys	Ala	Val	Val	Leu	His	Val	125	130	135	
Leu	Pro	Glu	Glu	Pro	Lys	Glu	Leu	Met	Val	His	Val	Gly	Gly	Leu	140	145	150	
Ile	Gln	Met	Gly	Cys	Val	Phe	Gln	Ser	Thr	Glu	Val	Lys	His	Val	155	160	165	
Thr	Lys	Val	Glu	Trp	Ile	Phe	Ser	Gly	Arg	Arg	Ala	Lys	Glu	Glu				

[illegible]

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<210> 521
<211> 963
<212> DNA
<213> Homo Sapien
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 cctgcatcct cctcctggtg gcgtgtgatg gctttgattc tgctgatect 300
 gtgcgtgggg atggttgtcg ggctgggtggc tctggggatt tggctctgtca 350
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 caacaattag caaagcgctt ctgtcaatat gtggtaaaac aatcagaact 450
 aaagggcact ttcaaaggtc ataaatgcag cccctgtgac acaaactgga 500
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 gttgggtcgg attatctcgc cagaagtcga atgaggtctg gaagtgggag 700
 gatggctcgg ttatctcaga aaatatgttt gagtttttgg aagatggaaa 750
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<210> 522
 <211> 229
 <212> PRT
 <213> Homo Sapien

<400> 522
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 35 40 45
 Val Gly Leu Val Ala Leu Gly Ile Trp Ser Val Met Gln Arg Asn
 50 55 60
 Tyr Leu Gln Asp Glu Asn Glu Asn Arg Thr Gly Thr Leu Gln Gln
 65 70 75
 Leu Ala Lys Arg Phe Cys Gln Tyr Val Val Lys Gln Ser Glu Leu
 80 85 90

Lys	Gly	Thr	Phe	Lys	Gly	His	Lys	Cys	Ser	Pro	Cys	Asp	Thr	Asn	
				95					100					105	
Trp	Arg	Tyr	Tyr	Gly	Asp	Ser	Cys	Tyr	Gly	Phe	Phe	Arg	His	Asn	
				110					115					120	
Leu	Thr	Trp	Glu	Glu	Ser	Lys	Gln	Tyr	Cys	Thr	Asp	Met	Asn	Ala	
				125					130					135	
Thr	Leu	Leu	Lys	Ile	Asp	Asn	Arg	Asn	Ile	Val	Glu	Tyr	Ile	Lys	
				140					145					150	
Ala	Arg	Thr	His	Leu	Ile	Arg	Trp	Val	Gly	Leu	Ser	Arg	Gln	Lys	
				155					160					165	
Ser	Asn	Glu	Val	Trp	Lys	Trp	Glu	Asp	Gly	Ser	Val	Ile	Ser	Glu	
				170					175					180	
Asn	Met	Phe	Glu	Phe	Leu	Glu	Asp	Gly	Lys	Gly	Asn	Met	Asn	Cys	
				185					190					195	
Ala	Tyr	Phe	His	Asn	Gly	Lys	Met	His	Pro	Thr	Phe	Cys	Glu	Asn	
				200					205					210	
Lys	His	Tyr	Leu	Met	Cys	Glu	Arg	Lys	Ala	Gly	Met	Thr	Lys	Val	
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Asp Gln Leu Pro

<210> 523
 <211> 1197
 <212> DNA
 <213> Homo Sapien

<400> 523
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 ttgtggactg gtgtttggta tcctggccct aactctaatt gtcctgtttt 200
 gggggagcaa gcacttctgg ccggaggtac ccaaaaaagc ctatgacatg 250
 gagcacactt tctacagcaa tggagagaag aagaagattt acatggaaat 300
 tgatcctgtg accagaactg aaatattcag aagcggaaat ggactgatg 350
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 gtgggtcttc aaaaatgttt tatcaaaact cagattaaag tgattcctga 450
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 ctttctttga acagtcagtg atttgggtcc cagcagaaaa gcctattgaa 550

aaccgagatt ttcttaaaaa ttccaaaatt ctggagattt gtgataacgt 600
gaccatgtat tggatcaatc ccactctaata atcagtttct gagttacaag 650
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atactgaaaa tggaatagaa tttgatccca tgctggatga gagaggttat 850
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atataataaa tgcattgctat tcaatgaatt tctgcctatg aggcatctgg 1100
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<210> 524

<211> 317

<212> PRT

<213> Homo Sapien

<400> 524

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Asn	Ala	Glu	Ala	Phe	Lys	Ser	Lys	Lys	Ile	Cys	Lys	Ser	Leu	Lys
				20					25					30
Ile	Cys	Gly	Leu	Val	Phe	Gly	Ile	Leu	Ala	Leu	Thr	Leu	Ile	Val
				35					40					45
Leu	Phe	Trp	Gly	Ser	Lys	His	Phe	Trp	Pro	Glu	Val	Pro	Lys	Lys
				50					55					60
Ala	Tyr	Asp	Met	Glu	His	Thr	Phe	Tyr	Ser	Asn	Gly	Glu	Lys	Lys
				65					70					75
Lys	Ile	Tyr	Met	Glu	Ile	Asp	Pro	Val	Thr	Arg	Thr	Glu	Ile	Phe
				80					85					90
Arg	Ser	Gly	Asn	Gly	Thr	Asp	Glu	Thr	Leu	Glu	Val	His	Asp	Phe
				95					100					105
Lys	Asn	Gly	Tyr	Thr	Gly	Ile	Tyr	Phe	Val	Gly	Leu	Gln	Lys	Cys
				110					115					120
Phe	Ile	Lys	Thr	Gln	Ile	Lys	Val	Ile	Pro	Glu	Phe	Ser	Glu	Pro
				125					130					135

Glu	Glu	Glu	Ile	Asp	Glu	Asn	Glu	Glu	Ile	Thr	Thr	Thr	Phe	Phe
				140					145					150
Glu	Gln	Ser	Val	Ile	Trp	Val	Pro	Ala	Glu	Lys	Pro	Ile	Glu	Asn
				155					160					165
Arg	Asp	Phe	Leu	Lys	Asn	Ser	Lys	Ile	Leu	Glu	Ile	Cys	Asp	Asn
				170					175					180
Val	Thr	Met	Tyr	Trp	Ile	Asn	Pro	Thr	Leu	Ile	Ser	Val	Ser	Glu
				185					190					195
Leu	Gln	Asp	Phe	Glu	Glu	Glu	Gly	Glu	Asp	Leu	His	Phe	Pro	Ala
				200					205					210
Asn	Glu	Lys	Lys	Gly	Ile	Glu	Gln	Asn	Glu	Gln	Trp	Val	Val	Pro
				215					220					225
Gln	Val	Lys	Val	Glu	Lys	Thr	Arg	His	Ala	Arg	Gln	Ala	Ser	Glu
				230					235					240
Glu	Glu	Leu	Pro	Ile	Asn	Asp	Tyr	Thr	Glu	Asn	Gly	Ile	Glu	Phe
				245					250					255
Asp	Pro	Met	Leu	Asp	Glu	Arg	Gly	Tyr	Cys	Cys	Ile	Tyr	Cys	Arg
				260					265					270
Arg	Gly	Asn	Arg	Tyr	Cys	Arg	Arg	Val	Cys	Glu	Pro	Leu	Leu	Gly
				275					280					285
Tyr	Tyr	Pro	Tyr	Pro	Tyr	Cys	Tyr	Gln	Gly	Gly	Arg	Val	Ile	Cys
				290					295					300
Arg	Val	Ile	Met	Pro	Cys	Asn	Trp	Trp	Val	Ala	Arg	Met	Leu	Gly
				305					310					315

Arg Val

<210> 525
 <211> 535
 <212> DNA
 <213> Homo Sapien

<400> 525
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 ctcagaagct gctagtctgt ctccaaaaaa agtggactgc agcatttaca 150
 agaagtatcc agtgggtggcc atcccctgcc ccatcacata cctaccagtt 200
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tcacatcccc aggctctgac tgagtttctt tcagttttac tgatgttctg 400
 ggtgggggac agagccagat tcagagtaat cttgactgaa tggagaaagt 450
 ttctgtgcta cccctacaaa cccatgcctc actgacagac cagcattttt 500
 tttttaacac gtcaataaaa aaataatctc ccaga 535

<210> 526
 <211> 85
 <212> PRT
 <213> Homo Sapien

<400> 526
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 20 25 30
 Asp Cys Ser Ile Tyr Lys Lys Tyr Pro Val Val Ala Ile Pro Cys
 35 40 45
 Pro Ile Thr Tyr Leu Pro Val Cys Gly Ser Asp Tyr Ile Thr Tyr
 50 55 60
 Gly Asn Glu Cys His Leu Cys Thr Glu Ser Leu Lys Ser Asn Gly
 65 70 75
 Arg Val Gln Phe Leu His Asp Gly Ser Cys
 80 85

<210> 527
 <211> 2387
 <212> DNA
 <213> Homo Sapien

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 ccaagactcg ctacgaggat gtcaaccccg tgctattgtc gggccccgag 200
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 aataaatatt tttggtatatt atttatgaaa tatttgaaca ttttttcaat 2100
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 atgtttggac aattagcaac aagtcagata gttagaatcg aagtttttca 2200
 aatccattgc ttagctaact ttttcattct gtcacttggc ttcgattttt 2250
 atattttcct attatatgaa atgtatcttt tgggtgtttg atttttcttt 2300
 ctttctttgt aaatagttct gagttctgtc aaatgccgtg aaagtatttg 2350
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<210> 528

<211> 487

<212> PRT

<213> Homo Sapien

<400> 528

Met	Leu	Arg	Ala	Pro	Gly	Cys	Leu	Leu	Arg	Thr	Ser	Val	Ala	Pro	1	5	10	15
Ala	Ala	Ala	Leu	Ala	Ala	Ala	Leu	Leu	Ser	Ser	Leu	Ala	Arg	Cys	20	25	30	
Ser	Leu	Leu	Glu	Pro	Arg	Asp	Pro	Val	Ala	Ser	Ser	Leu	Ser	Pro	35	40	45	
Tyr	Phe	Gly	Thr	Lys	Thr	Arg	Tyr	Glu	Asp	Val	Asn	Pro	Val	Leu	50	55	60	
Leu	Ser	Gly	Pro	Glu	Ala	Pro	Trp	Arg	Asp	Pro	Glu	Leu	Leu	Glu	65	70	75	
Gly	Thr	Cys	Thr	Pro	Val	Gln	Leu	Val	Ala	Leu	Ile	Arg	His	Gly	80	85	90	
Thr	Arg	Tyr	Pro	Thr	Val	Lys	Gln	Ile	Arg	Lys	Leu	Arg	Gln	Leu	95	100	105	
His	Gly	Leu	Leu	Gln	Ala	Arg	Gly	Ser	Arg	Asp	Gly	Gly	Ala	Ser	110	115	120	
Ser	Thr	Gly	Ser	Arg	Asp	Leu	Gly	Ala	Ala	Leu	Ala	Asp	Trp	Pro	125	130	135	
Leu	Trp	Tyr	Ala	Asp	Trp	Met	Asp	Gly	Gln	Leu	Val	Glu	Lys	Gly	140	145	150	
Arg	Gln	Asp	Met	Arg	Gln	Leu	Ala	Leu	Arg	Leu	Ala	Ser	Leu	Phe	155	160	165	
Pro	Ala	Leu	Phe	Ser	Arg	Glu	Asn	Tyr	Gly	Arg	Leu	Arg	Leu	Ile				

				170					175					180	
Thr	Ser	Ser	Lys	His	Arg	Cys	Met	Asp	Ser	Ser	Ala	Ala	Phe	Leu	
				185					190					195	
Gln	Gly	Leu	Trp	Gln	His	Tyr	His	Pro	Gly	Leu	Pro	Pro	Pro	Asp	
				200					205					210	
Val	Ala	Asp	Met	Glu	Phe	Gly	Pro	Pro	Thr	Val	Asn	Asp	Lys	Leu	
				215					220					225	
Met	Arg	Phe	Phe	Asp	His	Cys	Glu	Lys	Phe	Leu	Thr	Glu	Val	Glu	
				230					235					240	
Lys	Asn	Ala	Thr	Ala	Leu	Tyr	His	Val	Glu	Ala	Phe	Lys	Thr	Gly	
				245					250					255	
Pro	Glu	Met	Gln	Asn	Ile	Leu	Lys	Lys	Val	Ala	Ala	Thr	Leu	Gln	
				260					265					270	
Val	Pro	Val	Asn	Asp	Leu	Asn	Ala	Asp	Leu	Ile	Gln	Val	Ala	Phe	
				275					280					285	
Phe	Thr	Cys	Ser	Phe	Asp	Leu	Ala	Ile	Lys	Gly	Val	Lys	Ser	Pro	
				290					295					300	
Trp	Cys	Asp	Val	Phe	Asp	Ile	Asp	Asp	Ala	Lys	Val	Leu	Glu	Tyr	
				305					310					315	
Leu	Asn	Asp	Leu	Lys	Gln	Tyr	Trp	Lys	Arg	Gly	Tyr	Gly	Tyr	Thr	
				320					325					330	
Ile	Asn	Ser	Arg	Ser	Ser	Cys	Thr	Leu	Phe	Gln	Asp	Ile	Phe	Gln	
				335					340					345	
His	Leu	Asp	Lys	Ala	Val	Glu	Gln	Lys	Gln	Arg	Ser	Gln	Pro	Ile	
				350					355					360	
Ser	Ser	Pro	Val	Ile	Leu	Gln	Phe	Gly	His	Ala	Glu	Thr	Leu	Leu	
				365					370					375	
Pro	Leu	Leu	Ser	Leu	Met	Gly	Tyr	Phe	Lys	Asp	Lys	Glu	Pro	Leu	
				380					385					390	
Thr	Ala	Tyr	Asn	Tyr	Lys	Lys	Gln	Met	His	Arg	Lys	Phe	Arg	Ser	
				395					400					405	
Gly	Leu	Ile	Val	Pro	Tyr	Ala	Ser	Asn	Leu	Ile	Phe	Val	Leu	Tyr	
				410					415					420	
His	Cys	Glu	Asn	Ala	Lys	Thr	Pro	Lys	Glu	Gln	Phe	Arg	Val	Gln	
				425					430					435	
Met	Leu	Leu	Asn	Glu	Lys	Val	Leu	Pro	Leu	Ala	Tyr	Ser	Gln	Glu	
				440					445					450	
Thr	Val	Ser	Phe	Tyr	Glu	Asp	Leu	Lys	Asn	His	Tyr	Lys	Asp	Ile	
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Leu Gln Ser Cys Gln Thr Ser Glu Glu Cys Glu Leu Ala Arg Ala
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Asn Ser Thr Ser Asp Glu Leu
485

<210> 529

<211> 1777

<212> DNA

<213> Homo Sapien

<400> 529

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agtggctgga cgatggcagc gtccgccgga gccggggcgg tgattgcagc 200
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 cgtggagagt aaaaagtatc ggtttta 1777

<210> 530
 <211> 269
 <212> PRT
 <213> Homo Sapien

<400> 530
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 Ser Arg Arg Trp Leu Trp Ser Val Leu Ala Ala Ala Leu Gly Leu
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 Leu Thr Ala Gly Val Ser Ala Leu Glu Val Tyr Thr Pro Lys Glu
 35 40 45
 Ile Phe Val Ala Asn Gly Thr Gln Gly Lys Leu Thr Cys Lys Phe
 50 55 60
 Lys Ser Thr Ser Thr Thr Gly Gly Leu Thr Ser Val Ser Trp Ser
 65 70 75
 Phe Gln Pro Glu Gly Ala Asp Thr Thr Val Ser Phe Phe His Tyr
 80 85 90
 Ser Gln Gly Gln Val Tyr Leu Gly Asn Tyr Pro Pro Phe Lys Asp
 95 100 105
 Arg Ile Ser Trp Ala Gly Asp Leu Asp Lys Lys Asp Ala Ser Ile
 110 115 120
 Asn Ile Glu Asn Met Gln Phe Ile His Asn Gly Thr Tyr Ile Cys
 125 130 135

Asp	Val	Lys	Asn	Pro	Pro	Asp	Ile	Val	Val	Gln	Pro	Gly	His	Ile
			140						145					150
Arg	Leu	Tyr	Val	Val	Glu	Lys	Glu	Asn	Leu	Pro	Val	Phe	Pro	Val
			155						160					165
Trp	Val	Val	Val	Gly	Ile	Val	Thr	Ala	Val	Val	Leu	Gly	Leu	Thr
			170						175					180
Leu	Leu	Ile	Ser	Met	Ile	Leu	Ala	Val	Leu	Tyr	Arg	Arg	Lys	Asn
			185						190					195
Ser	Lys	Arg	Asp	Tyr	Thr	Gly	Cys	Ser	Thr	Ser	Glu	Ser	Leu	Ser
			200						205					210
Pro	Val	Lys	Gln	Ala	Pro	Arg	Lys	Ser	Pro	Ser	Asp	Thr	Glu	Gly
			215						220					225
Leu	Val	Lys	Ser	Leu	Pro	Ser	Gly	Ser	His	Gln	Gly	Pro	Val	Ile
			230						235					240
Tyr	Ala	Gln	Leu	Asp	His	Ser	Gly	Gly	His	His	Ser	Asp	Lys	Ile
			245						250					255
Asn	Lys	Ser	Glu	Ser	Val	Val	Tyr	Ala	Asp	Ile	Arg	Lys	Asn	
			260						265					

<210> 531
 <211> 1150
 <212> DNA
 <213> Homo Sapien

<400> 531
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 <212> PRT
 <213> Homo Sapien

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 35 40 45
 Gly Glu Ala Cys Gly Thr Val Gly Leu Leu Leu Glu His Ser Phe
 50 55 60
 Glu Ile Asp Asp Ser Ala Asn Phe Arg Lys Arg Gly Ser Leu Leu
 65 70 75
 Trp Asn Gln Gln Asp Gly Thr Leu Ser Leu Ser Gln Arg Gln Leu
 80 85 90
 Ser Glu Glu Glu Arg Gly Arg Leu Arg Asp Val Ala Ala Leu Asn
 95 100 105
 Gly Leu Tyr Arg Val Arg Ile Pro Arg Arg Pro Gly Ala Leu Asp
 110 115 120
 Gly Leu Glu Ala Gly Gly Tyr Val Ser Ser Phe Val Pro Ala Cys
 125 130 135
 Ser Leu Val Glu Ser His Leu Ser Asp Gln Leu Thr Leu His Val
 140 145 150
 Asp Val Ala Gly Asn Val Val Gly Val Ser Val Val Thr His Pro
 155 160 165

Gly	Gly	Cys	Arg	Gly	His	Glu	Val	Glu	Asp	Val	Asp	Leu	Glu	Leu
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Phe	Asn	Thr	Ser	Val	Gln	Leu	Gln	Pro	Pro	Thr	Thr	Ala	Pro	Gly
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Pro	Glu	Thr	Ala	Ala	Phe	Ile	Glu	Arg	Leu	Glu	Met	Glu	Gln	Ala
				200					205					210
Gln	Lys	Ala	Lys	Asn	Pro	Gln	Glu	Gln	Lys	Ser	Phe	Phe	Ala	Lys
				215					220					225
Tyr	Trp	Met	Tyr	Ile	Ile	Pro	Val	Val	Leu	Phe	Leu	Met	Met	Ser
				230					235					240
Gly	Ala	Pro	Asp	Thr	Gly	Gly	Gln	Gly	Gly	Gly	Gly	Gly	Gly	Gly
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 <213> Homo Sapien

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 <212> PRT
 <213> Homo Sapien

<400> 534

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 35 40 45
 Cys His Cys Gly Leu Gly Gly Arg Gly Gln Pro Lys Asp Ala Thr
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 Asp Trp Cys Cys Gln Thr His Asp Cys Cys Tyr Asp His Leu Lys
 65 70 75
 Thr Gln Gly Cys Gly Ile Tyr Lys Asp Asn Asn Lys Ser Ser Ile
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 Asn Val Ile Tyr Leu Glu Asn Glu Asp Ser Glu
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<210> 535

<211> 2379

<212> DNA

<213> Homo Sapien

<400> 535

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<210> 536
<211> 513
<212> PRT
<213> Homo Sapien

<400> 536
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35 40 45
Tyr Cys Glu Ser Gln Lys Leu Gln Glu Ile Pro Ser Ser Ile Ser
50 55 60
Ala Gly Cys Leu Gly Leu Ser Leu Arg Tyr Asn Ser Leu Gln Lys
65 70 75
Leu Lys Tyr Asn Gln Phe Lys Gly Leu Asn Gln Leu Thr Trp Leu
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Tyr Leu Asp His Asn His Ile Ser Asn Ile Asp Glu Asn Ala Phe
95 100 105
Asn Gly Ile Arg Arg Leu Lys Glu Leu Ile Leu Ser Ser Asn Arg
110 115 120
Ile Ser Tyr Phe Leu Asn Asn Thr Phe Arg Pro Val Thr Asn Leu
125 130 135
Arg Asn Leu Asp Leu Ser Tyr Asn Gln Leu His Ser Leu Gly Ser
140 145 150
Glu Gln Phe Arg Gly Leu Arg Lys Leu Leu Ser Leu His Leu Arg
155 160 165
Ser Asn Ser Leu Arg Thr Ile Pro Val Arg Ile Phe Gln Asp Cys
170 175 180
Arg Asn Leu Glu Leu Leu Asp Leu Gly Tyr Asn Arg Ile Arg Ser
185 190 195
Leu Ala Arg Asn Val Phe Ala Gly Met Ile Arg Leu Lys Glu Leu
200 205 210

His	Leu	Glu	His	Asn	Gln	Phe	Ser	Lys	Leu	Asn	Leu	Ala	Leu	Phe	215	220	225
Pro	Arg	Leu	Val	Ser	Leu	Gln	Asn	Leu	Tyr	Leu	Gln	Trp	Asn	Lys	230	235	240
Ile	Ser	Val	Ile	Gly	Gln	Thr	Met	Ser	Trp	Thr	Trp	Ser	Ser	Leu	245	250	255
Gln	Arg	Leu	Asp	Leu	Ser	Gly	Asn	Glu	Ile	Glu	Ala	Phe	Ser	Gly	260	265	270
Pro	Ser	Val	Phe	Gln	Cys	Val	Pro	Asn	Leu	Gln	Arg	Leu	Asn	Leu	275	280	285
Asp	Ser	Asn	Lys	Leu	Thr	Phe	Ile	Gly	Gln	Glu	Ile	Leu	Asp	Ser	290	295	300
Trp	Ile	Ser	Leu	Asn	Asp	Ile	Ser	Leu	Ala	Gly	Asn	Ile	Trp	Glu	305	310	315
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Lys	Gly	Leu	Arg	Glu	Asn	Thr	Ile	Ile	Cys	Ala	Ser	Pro	Lys	Glu	335	340	345
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Cys	Gly	Lys	Ser	Thr	Thr	Glu	Arg	Phe	Asp	Leu	Ala	Arg	Ala	Leu	365	370	375
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Pro	Glu	Thr	Asp	Ala	Asp	Ala	Glu	His	Ile	Ser	Phe	His	Lys	Ile	410	415	420
Ile	Ala	Gly	Ser	Val	Ala	Leu	Phe	Leu	Ser	Val	Leu	Val	Ile	Leu	425	430	435
Leu	Val	Ile	Tyr	Val	Ser	Trp	Lys	Arg	Tyr	Pro	Ala	Ser	Met	Lys	440	445	450
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Arg	Gln	Ser	Leu	Lys	Gln	Met	Thr	Pro	Ser	Thr	Gln	Glu	Phe	Tyr	470	475	480
Val	Asp	Tyr	Lys	Pro	Thr	Asn	Thr	Glu	Thr	Ser	Glu	Met	Leu	Leu	485	490	495
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Cys Glu Val

<210> 537

<211> 3554

<212> DNA

<213> Homo Sapien

<400> 537

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Leu	Ala	Leu	Ile	Thr	Leu	Gly	Ile	Cys	Cys	Ala	Tyr	Arg	Arg	Gly	
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Tyr	Phe	Ile	Asn	Asn	Lys	Gln	Asp	Gly	Glu	Ser	Tyr	Lys	Asn	Pro	
				275					280					285	
Gly	Lys	Pro	Asp	Gly	Val	Asn	Tyr	Ile	Arg	Thr	Asp	Glu	Glu	Gly	
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<211> 2570

<212> DNA

<213> Homo Sapien

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<400> 540
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 35 40 45
 His Glu Leu Ser Ser Arg Val Ser Phe Gln Glu Ala Arg Leu Ala

	50	55	60
Cys Glu Ser Glu Gly Gly Val Leu Leu Ser Leu Glu Asn Glu Ala	65	70	75
Glu Gln Lys Leu Ile Glu Ser Met Leu Gln Asn Leu Thr Lys Pro	80	85	90
Gly Thr Gly Ile Ser Asp Gly Asp Phe Trp Ile Gly Leu Trp Arg	95	100	105
Asn Gly Asp Gly Gln Thr Ser Gly Ala Cys Pro Asp Leu Tyr Gln	110	115	120
Trp Ser Asp Gly Ser Asn Ser Gln Tyr Arg Asn Trp Tyr Thr Asp	125	130	135
Glu Pro Ser Cys Gly Ser Glu Lys Cys Val Val Met Tyr His Gln	140	145	150
Pro Thr Ala Asn Pro Gly Leu Gly Gly Pro Tyr Leu Tyr Gln Trp	155	160	165
Asn Asp Asp Arg Cys Asn Met Lys His Asn Tyr Ile Cys Lys Tyr	170	175	180
Glu Pro Glu Ile Asn Pro Thr Ala Pro Val Glu Lys Pro Tyr Leu	185	190	195
Thr Asn Gln Pro Gly Asp Thr His Gln Asn Val Val Val Thr Glu	200	205	210
Ala Gly Ile Ile Pro Asn Leu Ile Tyr Val Val Ile Pro Thr Ile	215	220	225
Pro Leu Leu Leu Leu Ile Leu Val Ala Phe Gly Thr Cys Cys Phe	230	235	240
Gln Met Leu His Lys Ser Lys Gly Arg Thr Lys Thr Ser Pro Asn	245	250	255
Gln Ser Thr Leu Trp Ile Ser Lys Ser Thr Arg Lys Glu Ser Gly	260	265	270

Met Glu Val

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 <213> Homo Sapien

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 <212> PRT
 <213> Homo Sapien

<400> 542
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 Val Ala Gln Pro Glu Val Asp Thr Thr Leu Gly Arg Val Arg Gly
 35 40 45
 Arg Gln Val Gly Val Lys Gly Thr Asp Arg Leu Val Asn Val Phe
 50 55 60
 Leu Gly Ile Pro Phe Ala Gln Pro Pro Leu Gly Pro Asp Arg Phe
 65 70 75
 Ser Ala Pro His Pro Ala Gln Pro Trp Glu Gly Val Arg Asp Ala
 80 85 90
 Ser Thr Ala Pro Pro Met Cys Leu Gln Asp Val Glu Ser Met Asn
 95 100 105

Ser	Ser	Arg	Phe	Val	Leu	Asn	Gly	Lys	Gln	Gln	Ile	Phe	Ser	Val	110	115	120
Ser	Glu	Asp	Cys	Leu	Val	Leu	Asn	Val	Tyr	Ser	Pro	Ala	Glu	Val	125	130	135
Pro	Ala	Gly	Ser	Gly	Arg	Pro	Val	Met	Val	Trp	Val	His	Gly	Gly	140	145	150
Ala	Leu	Ile	Thr	Gly	Ala	Ala	Thr	Ser	Tyr	Asp	Gly	Ser	Ala	Leu	155	160	165
Ala	Ala	Tyr	Gly	Asp	Val	Val	Val	Val	Thr	Val	Gln	Tyr	Arg	Leu	170	175	180
Gly	Val	Leu	Gly	Phe	Phe	Ser	Thr	Gly	Asp	Glu	His	Ala	Pro	Gly	185	190	195
Asn	Gln	Gly	Phe	Leu	Asp	Val	Val	Ala	Ala	Leu	Arg	Trp	Val	Gln	200	205	210
Glu	Asn	Ile	Ala	Pro	Phe	Gly	Gly	Asp	Leu	Asn	Cys	Val	Thr	Val	215	220	225
Phe	Gly	Gly	Ser	Ala	Gly	Gly	Ser	Ile	Ile	Ser	Gly	Leu	Val	Leu	230	235	240
Ser	Pro	Val	Ala	Ala	Gly	Leu	Phe	His	Arg	Ala	Ile	Thr	Gln	Ser	245	250	255
Gly	Val	Ile	Thr	Thr	Pro	Gly	Ile	Ile	Asp	Ser	His	Pro	Trp	Pro	260	265	270
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Pro	Ala	Glu	Met	Val	Gln	Cys	Leu	Gln	Gln	Lys	Glu	Gly	Glu	Glu	290	295	300
Leu	Val	Leu	Ser	Lys	Lys	Leu	Lys	Asn	Thr	Ile	Tyr	Pro	Leu	Thr	305	310	315
Val	Asp	Gly	Thr	Val	Phe	Pro	Lys	Ser	Pro	Lys	Glu	Leu	Leu	Lys	320	325	330
Glu	Lys	Pro	Phe	His	Ser	Val	Pro	Phe	Leu	Met	Gly	Val	Asn	Asn	335	340	345
His	Glu	Phe	Ser	Trp	Leu	Ile	Pro	Arg	Gly	Trp	Gly	Leu	Leu	Asp	350	355	360
Thr	Met	Glu	Gln	Met	Ser	Arg	Glu	Asp	Met	Leu	Ala	Ile	Ser	Thr	365	370	375
Pro	Val	Leu	Thr	Ser	Leu	Asp	Val	Pro	Pro	Glu	Met	Met	Pro	Thr	380	385	390
Val	Ile	Asp	Glu	Tyr	Leu	Gly	Ser	Asn	Ser	Asp	Ala	Gln	Ala	Lys			

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Pro	Thr	Val	Ser	Phe	Ser	Arg	Tyr	Leu	Arg	Asp	Ser	Gly	Ser	Pro
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Val	Phe	Phe	Tyr	Glu	Phe	Gln	His	Arg	Pro	Ser	Ser	Phe	Ala	Lys
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Ile	Lys	Pro	Ala	Trp	Val	Lys	Ala	Asp	His	Gly	Ala	Glu	Gly	Ala
				455					460					465
Phe	Val	Phe	Gly	Gly	Pro	Phe	Leu	Met	Asp	Glu	Ser	Ser	Arg	Leu
				470					475					480
Ala	Phe	Pro	Glu	Ala	Thr	Glu	Glu	Glu	Lys	Gln	Leu	Ser	Leu	Thr
				485					490					495
Met	Met	Ala	Gln	Trp	Thr	His	Phe	Ala	Arg	Thr	Gly	Asp	Pro	Asn
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Ser	Lys	Ala	Leu	Pro	Pro	Trp	Pro	Gln	Phe	Asn	Gln	Ala	Glu	Gln
				515					520					525
Tyr	Leu	Glu	Ile	Asn	Pro	Val	Pro	Arg	Ala	Gly	Gln	Lys	Phe	Arg
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Glu	Ala	Trp	Met	Gln	Phe	Trp	Ser	Glu	Thr	Leu	Pro	Ser	Lys	Ile
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Leu

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 <211> 3721
 <212> DNA
 <213> Homo Sapien

<400> 543
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 aaaaaaaaaa aaaaaaaaaa a 3721

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 <211> 888
 <212> PRT
 <213> Homo Sapien

<400> 544
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 Pro Pro Pro Leu Ser Val Ala Pro Arg Asp Tyr Leu Asn His Tyr
 35 40 45
 Pro Val Phe Val Gly Ser Gly Pro Gly Arg Leu Thr Pro Ala Glu
 50 55 60
 Gly Ala Asp Asp Leu Asn Ile Gln Arg Val Leu Arg Val Asn Arg
 65 70 75
 Thr Leu Phe Ile Gly Asp Arg Asp Asn Leu Tyr Arg Val Glu Leu
 80 85 90
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 95 100 105
 Trp Arg Ser Asn Pro Ser Asp Ile Asn Val Cys Arg Met Lys Gly
 110 115 120
 Lys Gln Glu Gly Glu Cys Arg Asn Phe Val Lys Val Leu Leu Leu
 125 130 135
 Arg Asp Glu Ser Thr Leu Phe Val Cys Gly Ser Asn Ala Phe Asn
 140 145 150
 Pro Val Cys Ala Asn Tyr Ser Ile Asp Thr Leu Gln Pro Val Gly
 155 160 165

Asp	Asn	Ile	Ser	Gly	Met	Ala	Arg	Cys	Pro	Tyr	Asp	Pro	Lys	His	170	175	180
Ala	Asn	Val	Ala	Leu	Phe	Ser	Asp	Gly	Met	Leu	Phe	Thr	Ala	Thr	185	190	195
Val	Thr	Asp	Phe	Leu	Ala	Ile	Asp	Ala	Val	Ile	Tyr	Arg	Ser	Leu	200	205	210
Gly	Asp	Arg	Pro	Thr	Leu	Arg	Thr	Val	Lys	His	Asp	Ser	Lys	Trp	215	220	225
Phe	Lys	Glu	Pro	Tyr	Phe	Val	His	Ala	Val	Glu	Trp	Gly	Ser	His	230	235	240
Val	Tyr	Phe	Phe	Phe	Arg	Glu	Ile	Ala	Met	Glu	Phe	Asn	Tyr	Leu	245	250	255
Glu	Lys	Val	Val	Val	Ser	Arg	Val	Ala	Arg	Val	Cys	Lys	Asn	Asp	260	265	270
Val	Gly	Gly	Ser	Pro	Arg	Val	Leu	Glu	Lys	Gln	Trp	Thr	Ser	Phe	275	280	285
Leu	Lys	Ala	Arg	Leu	Asn	Cys	Ser	Val	Pro	Gly	Asp	Ser	His	Phe	290	295	300
Tyr	Phe	Asn	Val	Leu	Gln	Ala	Val	Thr	Gly	Val	Val	Ser	Leu	Gly	305	310	315
Gly	Arg	Pro	Val	Val	Leu	Ala	Val	Phe	Ser	Thr	Pro	Ser	Asn	Ser	320	325	330
Ile	Pro	Gly	Ser	Ala	Val	Cys	Ala	Phe	Asp	Leu	Thr	Gln	Val	Ala	335	340	345
Ala	Val	Phe	Glu	Gly	Arg	Phe	Arg	Glu	Gln	Lys	Ser	Pro	Glu	Ser	350	355	360
Ile	Trp	Thr	Pro	Val	Pro	Glu	Asp	Gln	Val	Pro	Arg	Pro	Arg	Pro	365	370	375
Gly	Cys	Cys	Ala	Ala	Pro	Gly	Met	Gln	Tyr	Asn	Ala	Ser	Ser	Ala	380	385	390
Leu	Pro	Asp	Asp	Ile	Leu	Asn	Phe	Val	Lys	Thr	His	Pro	Leu	Met	395	400	405
Asp	Glu	Ala	Val	Pro	Ser	Leu	Gly	His	Ala	Pro	Trp	Ile	Leu	Arg	410	415	420
Thr	Leu	Met	Arg	His	Gln	Leu	Thr	Arg	Val	Ala	Val	Asp	Val	Gly	425	430	435
Ala	Gly	Pro	Trp	Gly	Asn	Gln	Thr	Val	Val	Phe	Leu	Gly	Ser	Glu	440	445	450
Ala	Gly	Thr	Val	Leu	Lys	Phe	Leu	Val	Arg	Pro	Asn	Ala	Ser	Thr			

				455					460					465	
Ser	Gly	Thr	Ser	Gly	Leu	Ser	Val	Phe	Leu	Glu	Glu	Phe	Glu	Thr	
				470					475					480	
Tyr	Arg	Pro	Asp	Arg	Cys	Gly	Arg	Pro	Gly	Gly	Gly	Glu	Thr	Gly	
				485					490					495	
Gln	Arg	Leu	Leu	Ser	Leu	Glu	Leu	Asp	Ala	Ala	Ser	Gly	Gly	Leu	
				500					505					510	
Leu	Ala	Ala	Phe	Pro	Arg	Cys	Val	Val	Arg	Val	Pro	Val	Ala	Arg	
				515					520					525	
Cys	Gln	Gln	Tyr	Ser	Gly	Cys	Met	Lys	Asn	Cys	Ile	Gly	Ser	Gln	
				530					535					540	
Asp	Pro	Tyr	Cys	Gly	Trp	Ala	Pro	Asp	Gly	Ser	Cys	Ile	Phe	Leu	
				545					550					555	
Ser	Pro	Gly	Thr	Arg	Ala	Ala	Phe	Glu	Gln	Asp	Val	Ser	Gly	Ala	
				560					565					570	
Ser	Thr	Ser	Gly	Leu	Gly	Asp	Cys	Thr	Gly	Leu	Leu	Arg	Ala	Ser	
				575					580					585	
Leu	Ser	Glu	Asp	Arg	Ala	Gly	Leu	Val	Ser	Val	Asn	Leu	Leu	Val	
				590					595					600	
Thr	Ser	Ser	Val	Ala	Ala	Phe	Val	Val	Gly	Ala	Val	Val	Ser	Gly	
				605					610					615	
Phe	Ser	Val	Gly	Trp	Phe	Val	Gly	Leu	Arg	Glu	Arg	Arg	Glu	Leu	
				620					625					630	
Ala	Arg	Arg	Lys	Asp	Lys	Glu	Ala	Ile	Leu	Ala	His	Gly	Ala	Gly	
				635					640					645	
Glu	Ala	Val	Leu	Ser	Val	Ser	Arg	Leu	Gly	Glu	Arg	Arg	Ala	Gln	
				650					655					660	
Gly	Pro	Gly	Gly	Arg	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Ala	Gly	Val	
				665					670					675	
Pro	Pro	Glu	Ala	Leu	Leu	Ala	Pro	Leu	Met	Gln	Asn	Gly	Trp	Ala	
				680					685					690	
Lys	Ala	Thr	Leu	Leu	Gln	Gly	Gly	Pro	His	Asp	Leu	Asp	Ser	Gly	
				695					700					705	
Leu	Leu	Pro	Thr	Pro	Glu	Gln	Thr	Pro	Leu	Pro	Gln	Lys	Arg	Leu	
				710					715					720	
Pro	Thr	Pro	His	Pro	His	Pro	His	Ala	Leu	Gly	Pro	Arg	Ala	Trp	
				725					730					735	
Asp	His	Gly	His	Pro	Leu	Leu	Pro	Ala	Ser	Ala	Ser	Ser	Ser	Leu	
				740					745					750	

Leu Leu Leu Ala Pro Ala Arg Ala Pro Glu Gln Pro Pro Ala Pro
 755 760 765
 Gly Glu Pro Thr Pro Asp Gly Arg Leu Tyr Ala Ala Arg Pro Gly
 770 775 780
 Arg Ala Ser His Gly Asp Phe Pro Leu Thr Pro His Ala Ser Pro
 785 790 795
 Asp Arg Arg Arg Val Val Ser Ala Pro Thr Gly Pro Leu Asp Pro
 800 805 810
 Ala Ser Ala Ala Asp Gly Leu Pro Arg Pro Trp Ser Pro Pro Pro
 815 820 825
 Thr Gly Ser Leu Arg Arg Pro Leu Gly Pro His Ala Pro Pro Ala
 830 835 840
 Ala Thr Leu Arg Arg Thr His Thr Phe Asn Ser Gly Glu Ala Arg
 845 850 855
 Pro Gly Asp Arg His Arg Gly Cys His Ala Arg Pro Gly Thr Asp
 860 865 870
 Leu Ala His Leu Leu Pro Tyr Gly Gly Ala Asp Arg Thr Ala Pro
 875 880 885
 Pro Val Pro

<210> 545
 <211> 1571
 <212> DNA
 <213> Homo Sapien

<400> 545
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 gtgggtctga ggggaccaga agggtagact acgttggctt tctggaaggg 100
 gaggctatat gcgtcaattc cccaaaacaa gttttgacat ttcccctgaa 150
 atgtcattct ctatctattc actgcaagtg cctgctgttc caggccttac 200
 ctgctgggca ctaacggcgg agccaggatg gggacagaat aaaggagcca 250
 cgacctgtgc caccaactcg cactcagact ctgaactcag acctgaaatc 300
 ttctcttcac gggaggcttg gcagtttttc ttactcctgt ggtctccaga 350
 tttcaggcct aagatgaaag cctctagtct tgccttcagc cttctctctg 400
 ctgcgtttta tctcctatgg actccttcca ctggactgaa gacactcaat 450
 ttgggaagct gtgtgatcgc cacaacctt caggaaatac gaaatggatt 500
 ttctgagata cggggcagtg tgcaagccaa agatggaaac attgacatca 550

gaatcttaag gaggactgag tctttgcaag acacaaagcc tgcgaatcga 600
 tgctgcctcc tgcgccatth gctaagactc tatctggaca gggatattta 650
 aaactaccag acccctgacc attatactct ccggaagatc agcagcctcg 700
 ccaattcctt tcttaccatc aagaaggacc tccggctctc tcatgcccac 750
 atgacatgcc attgtgggga ggaagcaatg aagaaatata gccagattct 800
 gagtcacttt gaaaagctgg aacctcaggc agcagttgtg aaggctttgg 850
 gggaactaga cattcttctg caatggatgg aggagacaga ataggaggaa 900
 agtgatgctg ctgctaagaa tattcgaggt caagagctcc agtcttcaat 950
 acctgcagag gaggcattgac cccaaaccac catctcttta ctgtactagt 1000
 cttgtgctgg tcacagtgtg tcttatttat gcattacttg cttccttgca 1050
 tgattgtctt tatgcacccc caatcttaat tgagaccata cttgtataag 1100
 atttttgtaa tatctttctg ctattggata tatttattag ttaatatatt 1150
 tatttatttt ttgctattta atgtatttat ttttttactt ggacatgaaa 1200
 ctttaaaaaa attcacagat tatatttata acctgactag agcaggtgat 1250
 gtatttttat acagtaaaaa aaaaaaacct tgtaaattct agaagagtgg 1300
 ctaggggggt tattcatttg tattcaacta aggacatatt tactcatgct 1350
 gatgctctgt gagatatttg aaattgaacc aatgactact taggatgggt 1400
 tgtggaataa gttttgatgt ggaattgcac atctacctta caattactga 1450
 ccatccccag tagactcccc agtcccataa ttgtgtatct tccagccagg 1500
 aatcctacac ggccagcatg tatttctaca aataaagttt tctttgcata 1550
 ccaaaaaaaaa aaaaaaaaaa a 1571

<210> 546

<211> 261

<212> PRT

<213> Homo Sapien

<400> 546

Met	Arg	Gln	Phe	Pro	Lys	Thr	Ser	Phe	Asp	Ile	Ser	Pro	Glu	Met
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Ser	Phe	Ser	Ile	Tyr	Ser	Leu	Gln	Val	Pro	Ala	Val	Pro	Gly	Leu
			20						25					30
Thr	Cys	Trp	Ala	Leu	Thr	Ala	Glu	Pro	Gly	Trp	Gly	Gln	Asn	Lys
			35						40					45
Gly	Ala	Thr	Thr	Cys	Ala	Thr	Asn	Ser	His	Ser	Asp	Ser	Glu	Leu

				50						55					60
Arg	Pro	Glu	Ile	Phe	Ser	Ser	Arg	Glu	Ala	Trp	Gln	Phe	Phe	Leu	
				65					70					75	
Leu	Leu	Trp	Ser	Pro	Asp	Phe	Arg	Pro	Lys	Met	Lys	Ala	Ser	Ser	
				80					85					90	
Leu	Ala	Phe	Ser	Leu	Leu	Ser	Ala	Ala	Phe	Tyr	Leu	Leu	Trp	Thr	
				95					100					105	
Pro	Ser	Thr	Gly	Leu	Lys	Thr	Leu	Asn	Leu	Gly	Ser	Cys	Val	Ile	
				110					115					120	
Ala	Thr	Asn	Leu	Gln	Glu	Ile	Arg	Asn	Gly	Phe	Ser	Glu	Ile	Arg	
				125					130					135	
Gly	Ser	Val	Gln	Ala	Lys	Asp	Gly	Asn	Ile	Asp	Ile	Arg	Ile	Leu	
				140					145					150	
Arg	Arg	Thr	Glu	Ser	Leu	Gln	Asp	Thr	Lys	Pro	Ala	Asn	Arg	Cys	
				155					160					165	
Cys	Leu	Leu	Arg	His	Leu	Leu	Arg	Leu	Tyr	Leu	Asp	Arg	Val	Phe	
				170					175					180	
Lys	Asn	Tyr	Gln	Thr	Pro	Asp	His	Tyr	Thr	Leu	Arg	Lys	Ile	Ser	
				185					190					195	
Ser	Leu	Ala	Asn	Ser	Phe	Leu	Thr	Ile	Lys	Lys	Asp	Leu	Arg	Leu	
				200					205					210	
Ser	His	Ala	His	Met	Thr	Cys	His	Cys	Gly	Glu	Glu	Ala	Met	Lys	
				215					220					225	
Lys	Tyr	Ser	Gln	Ile	Leu	Ser	His	Phe	Glu	Lys	Leu	Glu	Pro	Gln	
				230					235					240	
Ala	Ala	Val	Val	Lys	Ala	Leu	Gly	Glu	Leu	Asp	Ile	Leu	Leu	Gln	
				245					250					255	
Trp	Met	Glu	Glu	Thr	Glu										
				260											

<210> 547
 <211> 2014
 <212> DNA
 <213> Homo Sapien

<400> 547
 agcaactcaa gttcatcatt gtcctgagag agaggagcag cgcggttctc 50
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 cgggctttga ttgtcctggg gtcgcggaga cccgcgcgcc tgccctgcac 150
 gccgggcggc aacctttgca gtcgcgttgg ctgctgcgat cggccggcgg 200

gtccctgccg aaggctcggc tgcttctgtc cacctcttac acttcttcat 250
 ttatcgggtg atcatttcga gagtccgtct tgtaaagtgt tggcactttg 300
 ctactttatt gcttctttct ggcgacagtt ccagcactcg ccgagaccgg 350
 cggagaaagg cagctgagcc cggagaagag cgaaatatgg ggacccgggc 400
 taaaagcaga cgtcgtcctt cccgcccgtt atttctatat tcaggcagtg 450
 gatacatcag ggaataaatt cacatcttct ccaggcgaaa aggtcttcca 500
 ggtgaaagtc tcagcaccag aggagcaatt cactagagtt ggagtccagg 550
 ttttagaccg aaaagatggg tccttcatag taagatacag aatgtatgca 600
 agctacaaaa atctgaaggt ggaaattaaa ttccaagggc aacatgtggc 650
 caaatcccca tatattttta aagggccggt ttaccatgag aactgtgact 700
 gtcctctgca agatagtgca gcctggctac gggagatgaa ctgccctgaa 750
 accattgctc agattcagag agatctggca catttccctg ctgtggatcc 800
 agaaaagatt gcagtagaaa tcccaaaaag atttggacag aggcagagcc 850
 tatgtcacta caccttaaag gataacaagg tttatatcaa gactcatggt 900
 gaacatgtag gttttagaat tttcatggat gccatactac tttctttgac 950
 tagaaagggt aagatgccag atgtggagct ctttggttaat ttgggagact 1000
 ggcctttgga aaaaaagaaa tccaattcaa acatccatcc gatcttttcc 1050
 tgggtgtggc ccacagattc caaggatatt gtgatgccta cgtacgattt 1100
 gactgattct gttctggaaa ccatgggccc ggtaagtctg gatatgatgt 1150
 ccgtgcaagc taacacgggt cctccctggg aaagcaaaaa ttccactgcc 1200
 gtctggagag ggcgagacag ccgcaaagag agactcgagc tggttaaact 1250
 cagtagaaaa caccagaac tcatagacgc tgctttcacc aactttttct 1300
 tctttaaaca cgatgaaaac ctgtatggtc ccattgtgaa acatatttca 1350
 ttttttgatt tcttcaagca taagtatcaa ataatatcg atggcactgt 1400
 agcagcttat cgctgccat atttgctagt tggtgacagt gttgtgctga 1450
 agcaggattc catctactat gaacattttt acaatgagct gcagccctgg 1500
 aaacactaca ttccagttaa gagcaacctg agcgatctgc tagaaaaact 1550
 taaatgggcg aaagatcacg atgaagaggc caaaaagata gcaaaagcag 1600
 gacaagaatt tgcaagaaat aatctcatgg gcgatgacat attctgttat 1650

tattttcaaac ttttccagga atatgccaat ttacaagtga gtgagcccca 1700
aatccgagag ggcataaaaa gggtagaacc acagactgag gacgacctct 1750
tccttctgtac ttgccatagg aaaaagacca aagatgaact ctgatatgca 1800
aaataacttc tattagaata atgggtgctct gaagactctt cttaactaaa 1850
aagaagaatt tttttaagta ttaattccat ggacaatata aaatctgtgt 1900
gattgtttgc agtatgaaga cacatttcta cttatgcagt atttctcatga 1950
ctgtacttta aagtacattt ttagaatttt ataataaaaac cacctttatt 2000
ttaaaggaaa aaaa 2014

<210> 548
<211> 502
<212> PRT
<213> Homo Sapien

<400> 548
Met Phe Gly Thr Leu Leu Leu Tyr Cys Phe Phe Leu Ala Thr Val
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Pro Ala Leu Ala Glu Thr Gly Gly Glu Arg Gln Leu Ser Pro Glu
20 25 30
Lys Ser Glu Ile Trp Gly Pro Gly Leu Lys Ala Asp Val Val Leu
35 40 45
Pro Ala Arg Tyr Phe Tyr Ile Gln Ala Val Asp Thr Ser Gly Asn
50 55 60
Lys Phe Thr Ser Ser Pro Gly Glu Lys Val Phe Gln Val Lys Val
65 70 75
Ser Ala Pro Glu Glu Gln Phe Thr Arg Val Gly Val Gln Val Leu
80 85 90
Asp Arg Lys Asp Gly Ser Phe Ile Val Arg Tyr Arg Met Tyr Ala
95 100 105
Ser Tyr Lys Asn Leu Lys Val Glu Ile Lys Phe Gln Gly Gln His
110 115 120
Val Ala Lys Ser Pro Tyr Ile Leu Lys Gly Pro Val Tyr His Glu
125 130 135
Asn Cys Asp Cys Pro Leu Gln Asp Ser Ala Ala Trp Leu Arg Glu
140 145 150
Met Asn Cys Pro Glu Thr Ile Ala Gln Ile Gln Arg Asp Leu Ala
155 160 165
His Phe Pro Ala Val Asp Pro Glu Lys Ile Ala Val Glu Ile Pro
170 175 180

Lys	Arg	Phe	Gly	Gln	Arg	Gln	Ser	Leu	Cys	His	Tyr	Thr	Leu	Lys	
				185					190					195	
Asp	Asn	Lys	Val	Tyr	Ile	Lys	Thr	His	Gly	Glu	His	Val	Gly	Phe	
				200					205					210	
Arg	Ile	Phe	Met	Asp	Ala	Ile	Leu	Leu	Ser	Leu	Thr	Arg	Lys	Val	
				215					220					225	
Lys	Met	Pro	Asp	Val	Glu	Leu	Phe	Val	Asn	Leu	Gly	Asp	Trp	Pro	
				230					235					240	
Leu	Glu	Lys	Lys	Lys	Ser	Asn	Ser	Asn	Ile	His	Pro	Ile	Phe	Ser	
				245					250					255	
Trp	Cys	Gly	Ser	Thr	Asp	Ser	Lys	Asp	Ile	Val	Met	Pro	Thr	Tyr	
				260					265					270	
Asp	Leu	Thr	Asp	Ser	Val	Leu	Glu	Thr	Met	Gly	Arg	Val	Ser	Leu	
				275					280					285	
Asp	Met	Met	Ser	Val	Gln	Ala	Asn	Thr	Gly	Pro	Pro	Trp	Glu	Ser	
				290					295					300	
Lys	Asn	Ser	Thr	Ala	Val	Trp	Arg	Gly	Arg	Asp	Ser	Arg	Lys	Glu	
				305					310					315	
Arg	Leu	Glu	Leu	Val	Lys	Leu	Ser	Arg	Lys	His	Pro	Glu	Leu	Ile	
				320					325					330	
Asp	Ala	Ala	Phe	Thr	Asn	Phe	Phe	Phe	Phe	Lys	His	Asp	Glu	Asn	
				335					340					345	
Leu	Tyr	Gly	Pro	Ile	Val	Lys	His	Ile	Ser	Phe	Phe	Asp	Phe	Phe	
				350					355					360	
Lys	His	Lys	Tyr	Gln	Ile	Asn	Ile	Asp	Gly	Thr	Val	Ala	Ala	Tyr	
				365					370					375	
Arg	Leu	Pro	Tyr	Leu	Leu	Val	Gly	Asp	Ser	Val	Val	Leu	Lys	Gln	
				380					385					390	
Asp	Ser	Ile	Tyr	Tyr	Glu	His	Phe	Tyr	Asn	Glu	Leu	Gln	Pro	Trp	
				395					400					405	
Lys	His	Tyr	Ile	Pro	Val	Lys	Ser	Asn	Leu	Ser	Asp	Leu	Leu	Glu	
				410					415					420	
Lys	Leu	Lys	Trp	Ala	Lys	Asp	His	Asp	Glu	Glu	Ala	Lys	Lys	Ile	
				425					430					435	
Ala	Lys	Ala	Gly	Gln	Glu	Phe	Ala	Arg	Asn	Asn	Leu	Met	Gly	Asp	
				440					445					450	
Asp	Ile	Phe	Cys	Tyr	Tyr	Phe	Lys	Leu	Phe	Gln	Glu	Tyr	Ala	Asn	
				455					460					465	
Leu	Gln	Val	Ser	Glu	Pro	Gln	Ile	Arg	Glu	Gly	Met	Lys	Arg	Val	

<210> 550
 <211> 198
 <212> PRT
 <213> Homo Sapien

<400> 550

Met	Phe	Lys	Val	Ile	Gln	Arg	Ser	Val	Gly	Pro	Ala	Ser	Leu	Ser
1				5					10					15
Leu	Leu	Thr	Phe	Lys	Val	Tyr	Ala	Ala	Pro	Lys	Lys	Asp	Ser	Pro
				20					25					30
Pro	Lys	Asn	Ser	Val	Lys	Val	Asp	Glu	Leu	Ser	Leu	Tyr	Ser	Val
				35					40					45
Pro	Glu	Gly	Gln	Ser	Lys	Tyr	Val	Glu	Glu	Ala	Arg	Ser	Gln	Leu
				50					55					60
Glu	Glu	Ser	Ile	Ser	Gln	Leu	Arg	His	Tyr	Cys	Glu	Pro	Tyr	Thr
				65					70					75
Thr	Trp	Cys	Gln	Glu	Thr	Tyr	Ser	Gln	Thr	Lys	Pro	Lys	Met	Gln
				80					85					90
Ser	Leu	Val	Gln	Trp	Gly	Leu	Asp	Ser	Tyr	Asp	Tyr	Leu	Gln	Asn
				95					100					105
Ala	Pro	Pro	Gly	Phe	Phe	Pro	Arg	Leu	Gly	Val	Ile	Gly	Phe	Ala
				110					115					120
Gly	Leu	Ile	Gly	Leu	Leu	Leu	Ala	Arg	Gly	Ser	Lys	Ile	Lys	Lys
				125					130					135
Leu	Val	Tyr	Pro	Pro	Gly	Phe	Met	Gly	Leu	Ala	Ala	Ser	Leu	Tyr
				140					145					150
Tyr	Pro	Gln	Gln	Ala	Ile	Val	Phe	Ala	Gln	Val	Ser	Gly	Glu	Arg
				155					160					165
Leu	Tyr	Asp	Trp	Gly	Leu	Arg	Gly	Tyr	Ile	Val	Ile	Glu	Asp	Leu
				170					175					180
Trp	Lys	Glu	Asn	Phe	Gln	Lys	Pro	Gly	Asn	Val	Lys	Asn	Ser	Pro
				185					190					195

Gly Thr Lys